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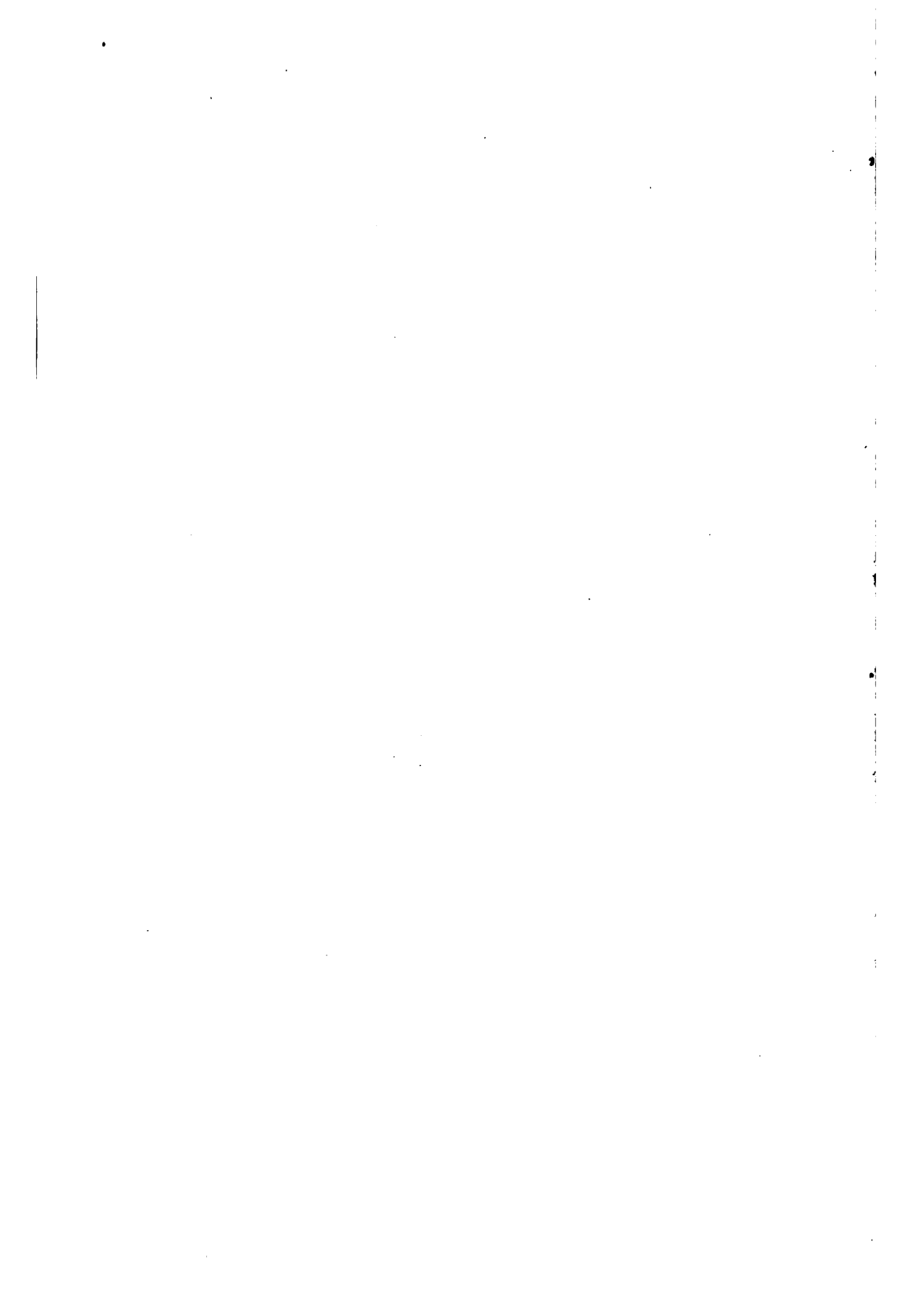
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**THE GIFT OF
RALPH BARTON PERRY**

**Edgar Pierce Professor
of Philosophy**

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C. C. C. C.
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C
AN EXAMINATION

OF

THE PHILOSOPHY OF THE UNKNOWABLE

AS EXPOUNDED BY

HERBERT SPENCER.

BY

WILLIAM M. LACY.

PHILADELPHIA:
SHERMAN & COMPANY, PRINTERS.
1912.

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PREFATORY NOTE

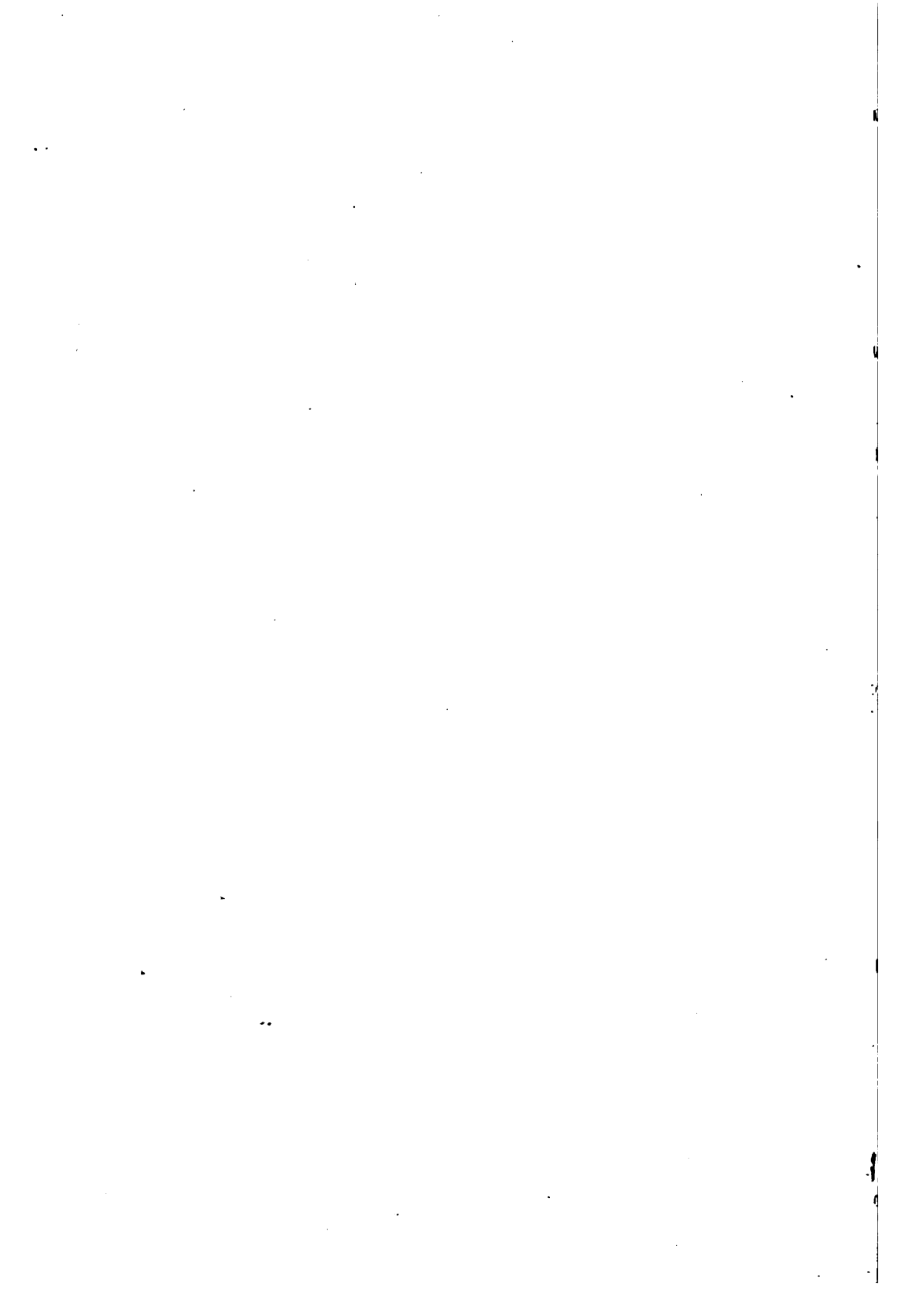
This book was published first in 1883. It may prove of interest to the reader to learn that all of the arguments herein contained—except the explanation of continued motion—were written on slates while the author was a student at Hastings' West Philadelphia Academy. During the year following graduation, these arguments appeared in a lengthy essay, which finally developed into the present work. Failing to secure a publisher, the author was obliged to set the type himself. This edition is printed from the original plates without a change.

Other facts to which I wish to draw the reader's attention are that "The Conception of the Infinite," by George S. Fullerton, was published in 1887; that the pivotal idea of that treatise—the idea that conception of the infinite is qualitative, not quantitative—will be found herein (pp. 33–36); and that Fullerton was a subscriber to this "Examination."

Twenty-one years ago William M. Lacy died, according to Dr. James E. Garretson, from a fever brought on by overwork, and is buried I know not where. And that is the end of the story till I write in full the tragedy of this book.

ERNEST LACY.

JANUARY 21, 1912.



OPINIONS OF THE PRESS

[LETTERS EXPRESSING APPRECIATION OF THIS WORK IN THE HIGHEST TERMS WERE RECEIVED FROM ALEXANDER BAIN, NOAH PORTER, AND OTHER PROMINENT THINKERS.]

The Christian Union (N. Y.).

Were we called upon to select a specimen nearly approaching the ideal of a philosophical polemic, we incline to think that we should take this book. It is certainly one of the cleanest, finest, most thorough pieces of metaphysical work which recent years have given us. It covers but one department of Mr. Spencer's vast system—his theory of the Unknowable—but it covers this perfectly. No position which he takes, scarcely any of importance which his views conceivably involve, on this theme, is neglected in the analysis. His exposition is followed everywhere; his thought is tracked into every elaborate labyrinth, advertised at every step, pointed to its logically inevitable lines of retrocession or advance, bidden to take its choice, and as the result of whatever choice, crowded out of its obscurity into open light, or reduced from its ingenious complexity into its simple self. Considered in the light of mere reasoning, it is a case of philosophical persecution. The whole movement is of such easy force as almost to excite sympathy for Mr. Spencer's agnosticism, to which no argumentative refuge seems open. Many, not familiar with this notorious system, might cry, "Is this helpless, unshapen thing the great dragon we have feared?"

We have spoken of this work as clean metaphysics. When we say that in this respect it matches Mr. Spencer's calmness, courtesy, guarded movement, and unswerving poise, we have likened it to one of the accepted models of recent literary art. In these respects we can give it no higher praise. There is no glow other than purely intellectual; rhetoric is excluded; appeals to prejudice or to fear are not even suggested; the religious bias is not indicated; it is a typical philosophic contest—struggle, we had first written; but the attack is too steady in its unhesitating, unpausing advance to be called by that term. . . . The criticism searches out both the thought and its terms, bringing to light in this so vaunted philosophy incongruity upon incongruity, and showing agnosticism to be nothing but an entanglement of fallacies presented with a wonderful semblance of system.

This remarkable work, though too analytic and profound for the reader not in some degree versed in metaphysical studies, is singularly clear and direct in its style. The style, indeed, is perfectly adapted to the thought and to the object of the work. As a treatise devoted to a single department, this may be pronounced well-nigh faultless.

Science.

There is a self-confidence in his manner, but there is no merely pretentious display of knowledge in his book. His style is Spencerian—Spencerian with a bit more of vigor, and without a bit less accuracy in form. The work is that of a mature thinker who has considered long and well.

The London Quarterly Review.

The writer of this able work subjects Mr. Spencer's philosophy to a searching and, in our view, destructive criticism. The criticism gains in effectiveness by its thoroughly courteous tone—a tone which Mr. Spencer might often imitate with advantage. . . . The second chapter, in which Mr. Lacy deals with Mr. Spencer's "fundamental fallacy," and shows "the impossibility of establishing unknowableness," is a fair specimen of the whole work. It is evident at once that Spencer's doctrine of the unknowable implies that the unknowable exists, and that it is known to be unknowable. How do we know so much? What is the sign of unknowableness? The only other predicate which the doctrine allows is that "the something exists." Here is a minor premise. What is the major? "The only possible major is, whatever exists is unknowable." We need not pursue the argument. Curiously enough, Mr. Spencer also calls the unknowable by other names, such as "the Real, as distinguished from the Phenomenal, the First Cause, the Infinite, the Absolute, the Creating, the Uncaused, the Actual, the Unconditioned." If all this is known about "the unknowable," Mr. Lacy may well call in question the appropriateness of the designation. The whole of this chapter is full of acute reasoning. Again, in arguing for the unthinkableableness of space, Mr. Spencer says, "Extension and space are convertible terms." On this Mr. Lacy says: "There needs no vocabulary to tell us that they are not. We never speak of matter as having space; we never speak of matter as occupying the quality extension. By extension, as we ascribe it to surrounding objects, we do not mean occupancy of space, although these two qualities are almost always found together." Occupancy of space involves ideas of coextensiveness and exclusiveness, which are not contained in the notion of extension. "Occupancy of space thus proving to be far more than extension, it becomes evident that we can attribute extension to space, without ascribing to it occupancy of itself. Consequently, extension may be claimed as one of the attributes of space." Under the head of "The Inductive Argument," Mr. Lacy criticises Spencer's teaching on causation, space, time, matter, motion, force, self-knowledge, extent of

consciousness and mental substance; under "The Deductive Argument" he analyses Spencer's views on the process of comprehension, the unconditioned, the nature of life, the power of thought to transcend consciousness. A chapter on the proposed reconciliation between science and religion concludes a volume which is one of the ablest replies and best antidotes to "First Principles" that we have met with. Mr. Spencer's reconciliation consists, of course, in the abolition of religion. He makes a solitude and calls it peace. "The reconciliation proposed by Mr. Spencer would be no reconciliation at all. No sooner would it become the accepted doctrine that the cause of all things is unknowable, than each thinker would frame a conception of it to suit himself." Materialist, Spiritualist, Realist, would each maintain his own position, and with equal right—because of the unknowable all hypotheses are equally admissible. The prophet of the unknowable must bring us better solutions than unknowables and ghost stories.

The Popular Science Monthly.

This volume is a metaphysical onslaught on Herbert Spencer's metaphysics, and may be recommended to all interested in the subject as acute, subtle, ingenious, and very well stated.

New York Observer.

The author of this work confines himself strictly to the subject mentioned on the title page, leaving entirely aside the doctrine of Evolution, with which, as he justly says, unknowableness has no necessary connection. To the theory that we can know nothing of the external world or of mental substance but their bare existence, he opposes an argument of very great force. This is what he justly styles the fundamental fallacy, for he declares and shows that Mr. Spencer's affirmations of nescience do in fact overthrow his own theory by assuming a certain degree of knowledge of the unknowable. . . .

This book is written in good temper and in direct and simple style. It makes no digressions and utters not a single personal reflection. It seems to us that the author has accomplished what he set out to perform, and so has rendered a good service.

The Atlantic Monthly.

Mr. Lacy opposes to Mr. Spencer's scheme of nescience the doctrine "that we are capable of realizing something of the nature of things occupying the region outside of consciousness." He treats Mr. Spencer with great courtesy, but attacks his positions with great vigor. His book is one worth consideration.

The Independent (N. Y.).

Mr. William M. Lacy grapples in manly fashion with the ultimate conclusions and implications of Herbert Spencer, in his *Examination of the Philosophy of the Unknowable*. He reduces the voluminous discussions of Mr. Spencer to their lowest terms and to their essential signification, and shows the contradictions involved in them. We cannot recommend the work as a diverting one, nor one in which much progress would be made in a hot day; but readers who delight in a task that requires the highest kind of intelligence and application, will be more than rewarded by the study of the acute and firmly reasoned *Examination*.

The Churchman (N. Y.).

In the examination of Mr. Spencer's philosophy presented in this work, the author is not only a realist, but believes and undertakes to show that the external world can be known in something more than its bare existence; that the power back of phenomena is not absolutely inscrutable—that Mr. Spencer's nescience theory is "unproved and unthinkable." To show the existence and knowability of reality is the object of the work. At the very threshold Mr. Lacy clears the ground of a good deal of uncertainty and confusion generally indulged in by previous writers, by the categorical statement that the "Doctrine of Evolution is not a party" to the issue, and then goes at once to the fundamental fallacy of Agnosticism, "The Impossibility of Establishing Unknowableness." This he does with the skill of a practiced tactician in the first chapter. Point after point of false reasoning, confusion of thought and gratuitous assumption, is exposed in a clear and unanswerable manner. . . . We should say "Read, mark, learn, and inwardly digest" this argument.

Mr. Spencer's Transfigured Realism is fairly stared out of countenance by the Problems of Realism with which it is confronted, as arrayed by the author. . . . In this book is to be found a valuable contribution towards establishing the knowability of the realities back of the external world.

The University Quarterly (N. Y.).

We have here a thorough and searching review of the philosophy of Spencer. At the outset the author directs attention to the conclusion of Spencer's reasoning touching "The Unknowable," and shows conclusively that in this lies the "fundamental fallacy" of the great philosopher's speculations, as it "is unthinkable and vitiates every argument from which it can be supposed to derive support." He then takes up Spencer's inductive and deductive arguments, and enters into a very close and careful analysis of them; concluding with an examination of his theory as to the reconciliation of Science and Religion. The author's rigid logic and keen penetration of mind have brought to light many flaws in the reasoning of

Spencer, and show many of his conclusions to be entirely unwarranted. Although not a new field there is here much that is really new ; and the author's method of reasoning and style of writing have an attraction which will undoubtedly secure for the book a very general and attentive perusal.

Evening Bulletin (Phila.).

While not pretending, in the space we can spare, to describe or criticise Mr. Lacy's work, we must tell our readers who may be studying Mr. Spencer's writings that it is thoughtful, dignified, and well written, and that the new American author is entitled to a most respectful hearing from all the large class that is concerned about many of the questions that agitate the inquisitive mind. Mr. Lacy is not an extreme optimist, but he is far removed from the pessimists, and he writes sincerely and with the skill of a true logician concerning many abstruse moral, religious, philosophical, and metaphysical subjects on which Herbert Spencer has written with matchless perspicuity and force. Whoever is familiar with Mr. Spencer's views should be interested in this really able treatise.

The Morning Star (Dover, N. H.).

Mr. William M. Lacy has made a valuable contribution to modern thought. His book is not one to be caught up in an idle moment. He is a master in metaphysical science ; possesses logical accuracy ; proceeds from step to step with cautious exactness ; and leaves upon the mind of the studious reader the conviction that he makes an unanswerable plea for reconciliation between science and religion. The whole book tends to this admirable conclusion. . . . We commend this volume as particularly valuable to libraries and to students.

The Evening Star (Phila.).

The work is one showing on every page the evidence of profound thought, and the conclusions gain force by the logical form in which they have been grasped. . . . Persons with a taste for philosophic reflection and inquiry, will find ample material for thought in the volume.

The Presbyterian Review (N. Y.).

Special notice of Mr. Lacy's book we reserve until we find time for an extended review of Spencer's reviewers. Meanwhile it must suffice to say, that Mr. Lacy writes clearly, boldly, and with independence. His criticisms of Spencer, so far as we have read this book, are acute and just.

The Times (Phila.).

There can be no doubt that when the world has taken time to understand Mr. Herbert Spencer's philosophy and has it reduced to the briefest formulas of which it is capable, many vulnerable points will be discov-

ered and many parts of the elaborate structure will be tumbled to pieces. Many attempts at this iconoclastic work have already been made. The latest, and in many respects the most capable, is "An Examination of the Philosophy of the Unknowable as Expounded by Herbert Spencer," by William M. Lacy. Any extended review of Mr. Lacy's work might be tiresome, but students of modern philosophy may be commended to it as a healthy and vigorous reaction against empiricism, Herbert Spencerism and all that it stands for.

American Inventor (Cincinnati.).

The author of this work has laid out for himself a difficult task. The agnostic principles of Herbert Spencer, as fully set forth in his work, have gained such ground that it needed the application of a master hand for their successful refutation. . . . In the progress of his argument to establish his position he very clearly exposes the incongruities of Mr. Spencer's arguments.

The Evening Call (Phila.).

While criticised with the utmost logical severity, Mr. Spencer cannot complain of the slightest discourtesy. On the contrary, it is evident that the writer holds Mr. Spencer in high esteem, and is in nowise opposed to the theory of universal progression. Mr. Lacy's work is systematically and perspicuously written, and is free from anything vague and mystical. Many definite issues are raised and discussed, no more with a view to the refutation of Mr. Spencer's doctrines than to the establishment of rival theories, in many cases original with the writer himself. To numbers of puzzling questions, physical and metaphysical, logical and religious, solutions are advanced. To the questions, why an object made to move continues in motion? and what is gravitation? Mr. Lacy gives a single answer—an answer certainly ingenious and plausible, since it seems to account for both mysteries. The metaphysical will find in the work an explanation of how the mind can know things outside of itself, and the religious will be interested in the author's views regarding the reconciliation between science and religion.

The Andover Review.

The author's argument is throughout courteous, lucid, and fair, and at times vigorous. We think it will commend itself to most minds as decidedly successful.

The Philadelphia Record.

A thoroughly, well, and even eloquently written work.

The American Journal of Physiology.

To review the work of any great thinker, such as Mr. Spencer, is no little task; but the task becomes immensely greater when the work to be reviewed is the combined thought of two great thinkers, especially when opposite views are held, and both deserving credit, justice, and consideration.

Considering the almost insurmountable difficulty of placing both Mr. Spencer and the author of this book in the proper light they deserve to be placed, we think it best in all probability that their arguments should be sufficiently reproduced that the reader may examine their weight and judge for himself.

* * * * *

Thus throughout the book Mr. Lacy by force of logic attacks all of Mr. Spencer's agnostic views—views most of which apparently were expressed to stand as eternal pyramids, but which under the analytic process of reasoning are demolished and vanish into oblivion. This argumentative warfare is carried throughout the entire work, producing thoughts on both sides of this great theological question of "The Unknowable," that perhaps were never produced before; and we can do no better than to refer the reader to the work itself as the proper exponent of the views advanced by Mr. Lacy. At least every American should, as a matter of pride as well as information, secure a copy of Mr. Lacy's work and examine for himself the profoundness of his reasoning capacity in a fair polemic discussion with the great English celebrity.

TWO LETTERS ON THE FREEDOM
OF THE WILL

I

DEAR [E.] LACY :

Being a good Presbyterian, I believe as firmly in predestination as you do, and predestination through motives : this was Jonathan Edwards' argument in his famous Calvinistic work on "the Will." I studied up that subject some years ago, and came to the conclusion that predestination must be accepted. This I believe as thoroughly as you do, but I believe more. Studying Bain and Edwards leads me to believe in predestination ; studying myself, leads me to believe in free-will. Some time ago a number of learned mathematicians met in Berlin to prove that the minute-hand of a clock cannot overtake the hour-hand, and came mathematically to the conclusion that it could not. Yet we know it does. There is a higher authority [than] the reason, and that is consciousness, common sense, or what you may call it. I mean that fact that we know intuitively that a thing is so, though we may not be able to prove it. No reasoning can prove to you that you exist, and philosophy accepts it without proof, as a simple incontestable fact, a fact of consciousness ; you *know* that you exist.

Just so I *feel* my personal responsibility to God and to my fellows, and the fact that men have remorse, and that the remorse is directly proportional to the feeling that it was his fault he swerved, *cannot* be explained except upon the supposition that the will is free.

You *know* that it is your fault if you sin to-day, and this feeling, which is implanted in your nature, is worth more than any proof. I have given up trying to reconcile the two, and accept both, as I think you will when you come to read *Lacy* instead of Bain, and to look in instead of out.

To my mind, the only conclusive, or, at least, the most conclusive proof of the existence of God is that internal one which is necessitated by our nature, and this too we must accept upon our intuitive feelings, upon the fact that we know that we are free.

All that you believe, I accept, but believe more, and this I think you too will accept in time.

Yours,

GEO. S. FULLERTON.

II

DEAR FULLERTON :—As the strongest motive now present to my brother's mind compels him to spend his time in writing his Valedictory Address, I, fearing that otherwise you might become impatient, take the liberty of replying to your controversial letter.

On this subject my views and those of my brother, I believe, concur. I, therefore, take his place and, becoming responsible for all attacks which you have made upon his position, will answer your arguments in substantially the same way as, had he not been otherwise engaged, he would ere now have done.

I am a Necessitarian. The conclusion at which I long ago arrived is the result of conversational discussion, observation of the general laws of nature, and introspection ; and not, as you seem to suppose, a study of the writings of Edwards, Bain, or any one else. Though I possess the work, I have never read over three pages of "Edwards on the Will," and as for Bain I know not whether he accepts or rejects the so-called doctrine of "Philosophical Necessity." I would not imply that I am wholly indifferent to the opinions of these philosophers, but merely that I have not yet found time to read their interesting and instructive works. I have always been led, partly by the force of circumstances and partly, I suppose, by natural predisposition, to think upon a subject first and "read up on" it afterwards—to trust rather to my own reasoning than to that of others. I do not regret that such has been the case. Those who rear a structure, and not those who inherit it, know best its worth and how to defend it.

I will first state my position : I believe that the mind is constructed, or formed, or made, or whatever you may please to call it, without any previous knowledge, determination, or action on its part ; in other words, that the mind is not its own maker. If this be true, it follows that the mind does not give to itself its own original character, and also that it does not determine its own environment. Now the first mental action (of whatever character it be) is the product of two factors : the mind as it is (which includes its character) and the circumstances in which it is placed. Similarly the second mental operation is the product of the mind as it is before the operation (which includes the modifications of the first operation) and the surrounding conditions ; and so on through life. Thus is every mental operation predetermined. This is a doctrine Presbyterian. From it there is no escape ; and you have attempted none.

You say that you believe in predestination. I rejoice at this both because I consider the doctrine of "Philosophical Necessity" a sound one and because it relieves me of the trouble of establishing, as far as I might be able, the position above stated. If you believe in predestination, you

believe that every act of volition was determined before the mind came into existence ; consequently that the will is not free. (I should prefer to state such a belief thus : volition is caused.) But you say also that you believe that the Will is free ; that all that my brother believes you "accept, but believe more ;" and that you "have given up trying to reconcile the two and accept both." By these assertions you have totally disarmed yourself. You have disregarded the Law of Contradiction by asserting (speculatively, of course) to contradictory propositions ; and now I defy you to prove either of the propositions without appealing to this very law whose authority you have renounced. If you appeal to it to show that the Will is free, I shall appeal to it to prove that the Will cannot be both free and not free ; if you decline to recognise its authority, you are powerless to prove that the Will is free. As I say in an essay I am now writing (entitled "Man's Power of Conception as a Test of Truth"), "If the Law of Contradiction is disregarded it (the mind) cannot, with all the evidence that could possibly be furnished, prove the truth of either the first or the second proposition ; for any fact might be a fact and yet not a fact, or both, or all three ; and, though proving the truth of the proposition, might, nevertheless, prove it not true but untrue, or it might prove it both true and untrue, and yet neither true nor untrue, but, at the same time, all three." In fact, if the Law of Contradiction is not binding, anything may be true, but nothing can be proved to be true ; therefore all of the arguments you have used avail you nothing. This truth will presently appear in a more definite form.

You attempt to show that there is a conflict between sound reason and common sense. There never was and never will be such a conflict ; for the basis of all sound reason is common sense. But, dropping this, I am at a loss to know how it would be possible to prove that, in any case, sound reason and common sense conflict ; for the act of proving would be a discursive process, or reasoning, and this reasoning, though as sound as reasoning could be, might, according to the admission implicated by adherence to the conclusion which you were trying to establish, be fallible and, therefore, inconclusive. You cannot lift yourself over the fence by your boot-straps, and you cannot use sound reason to overthrow the authority of sound reason. But if, which is totally impossible, you had proved that, in the case in hand, there is a conflict between reasoning which must be endorsed by all and common sense, what then ? You by implication admit that two contradictory propositions may be true. Now, were it proved that there is here a conflict between reason and common sense, you would still have to show that it is not true that there is here no such conflict. I will not consume time in enumerating what, until you cease trying to show that the Will is both free and not free, will be the impossible intellectual feats which you will be under the necessity of performing. They are infinite. But were I to remove a great part of the *onus probandi* by saying, as you do, that, though reason leads us to believe

that the Will is not free, common sense teaches us that it is, what next? You would have still to prove that common sense does not teach us that the Will is not free also. Were I again to relieve you by admitting that common sense does not teach us that the Will is not free, but does teach us that the Will is free, and that this fact proves that the Will is free, you would still be obliged to show that the same fact does not prove that the Will is not free. In short, the propositions which have to be established before it can be shown that the Will is both free and not free grow more and more numerous. But it is impossible for you to make a beginning; for the moment you appeal to the Law of Contradiction I shall appeal to it, and then you must bid farewell to your beloved conclusion. As chess-players say, you are check-mated. Your king is exposed, and no move that you can make will more than change the exposure.

I will now pass to what you consider an instance of conflict between sound reason and common sense. You say "Some time ago a number of learned mathematicians met in Berlin to prove that the minute-hand of a clock cannot overtake the hour-hand, and came mathematically to the conclusion that it could not. Yet we know that it does." I fail to discover the conflict. The explanation is obvious—the mathematicians reasoned incorrectly, as I will proceed to show. This problem is rendered needlessly intricate; and thus it is that it is so amusing to some and so deceiving to others. I will state it in another and a simpler form. A and B are to race. The course is two miles. A permits B to start one mile in advance. If A is twice as swift as B, at what place will they be together? The solution is as follows: They start simultaneously. In a certain time B runs one mile and reaches the goal. In the same time A runs twice as far, or two miles, and reaches the goal. At the end of the race, therefore, they would be together. Observe that I have reached this conclusion not by experiment—for I never witnessed a race of this kind—but by reasoning. Now let us amuse ourselves with the attempted solution of the "learned mathematicians." When A has run one mile and reached the place where B started, B will have run one-half of a mile farther. When A has run the next half of a mile, B will be one-quarter of a mile in advance. When A has run this one-quarter of a mile, B will be one-eighth of a mile ahead, and so on to infinity. Place them at any distance apart, no matter how insignificant it may seem, and when A has run the distance at first between them, B will have run one-half as far, and still be so much in advance. We may divide units into halves, and halves into quarters, and thus continue the division forever, but we cannot thereby bring A and B together. Why not? Simply because, though we move A a certain distance, and B one-half as far, and again move A a certain distance, and B one-half as far, and continue this for eternity, we never let A or B reach the end of the second mile, which is the only place where they would actually be together. In such reasoning we miss a factor, and so obtain a wrong conclusion.

The following are your words intended to show that we know intuitively that the Will is free: "No reasoning can prove to you that you exist, and Philosophy accepts it without proof, as a simple incontestable fact, a fact of consciousness; you *know* that you exist. Just so I *feel* my responsibility to God and to my fellows." I should be sorry to oppose consciousness. If you will show me that we are conscious that the Will is free, I will give up the discussion. I will not trouble you any longer by urging that, on your principles as before included in a general statement, the fact that we are conscious of freedom may not be a fact, or may be both, or all three; and, though proving the truth of the assertion that the Will is free, may nevertheless, prove it not true but untrue; and yet neither true or untrue, but, at the same time, all three. I will not perplex your mind by asking you to place a marble in the palm of your left hand and then, having crossed the second finger of the right hand over the first finger of the same hand, to rub the ends of the two fingers thus crossed around over the marble, and then say if you do not with your fingers feel two marbles in place of one. These are difficulties which you must surmount, whether you prove that we are conscious of freedom or merely of responsibility. In the former case I will not urge these objections to your theory that the Will is free; but in the latter I most certainly shall. You say that you feel your responsibility and expect this to be as conclusive as if you had said that you were conscious of a free Will; but the two are widely different and to me appear to have little connection. I, too, believe in responsibility. For all of my sins I expect to suffer; but what has this to do with the freedom of my Will? Free or not free, justly or unjustly, the punishment follows the sin. We not only suffer for our own sins, but for the sins of others. The sins of the fathers are visited on the children, you know. All this we can believe without believing in the freedom of the Will. When, therefore, we say that the Will is not free, we are not opposing consciousness. There is only one way in which the belief in responsibility can give rise to a belief in the freedom of the Will, and that is by making responsibility an object of thought and reasoning; but reason, you appear to think, is not to be trusted.

But we are not conscious of responsibility. If your implicit assertion that you are conscious of responsibility is worth anything, it is canceled by mine, which is that no one was ever conscious of any such thing; and now proof on both sides is in order. You have given none; I will give mine. When I am held responsible for an act, I am accountable for the performance. Now, I can no more be conscious that I am to be held accountable than I can be conscious that I will go to New York tomorrow. Consciousness can be only of the present. Responsibility is something of the present and the future, of the past and the future, of the present and the past, and sometimes of the present, past, and future. I can think that I am now being held responsible, only by thinking of the

past also : I can think that I will be held responsible for an act which I am performing, only by thinking of the future in connection with the present. I cannot be conscious of anything past or future, but only of the present. The consciousness of responsibility, therefore, includes the consciousness of what is absent from consciousness ; which means that you are conscious of that of which you are not conscious. Perhaps you will assent to both of these contradictories, also ; but I can draw but the one inference, and that is that we cannot be conscious of responsibility. What consciousness, then, did I mistake for the consciousness of responsibility? you may ask. Which I answer by saying that we can be conscious of a judgment, conviction, or belief that we are responsible, but not of responsibility.

It is your opinion that "the fact that men have remorse, and that the remorse is directly proportional to the feeling that it was his fault he swerved, *cannot* be explained except upon the supposition that the will is free." I dissent from this. The explanations are as numerous as we have reason to expect. If a man merely thought that his Will were free, the fact that he would have remorse proportionate to his feeling that he might have done otherwise would need no elucidation. But this is not an explanation that is of universal application ; for those who do not believe in the freedom of the Will are, nevertheless, subject to remorse. The explanation is simply this : men know that they are responsible for their misdeeds ; and, therefore, regret the performance of the latter. Our remorse is (other factors being equal) proportionate to the feeling that our sins are due to our own faults (by faults, I mean defects) ; but this does not show that our Wills are free. The stronger our conviction that if we had not possessed such faults (or defects), that had we only been different from what we were, we would never have sinned, and never be held accountable, the more plainly we see what our condition might have been if things had only been different from what they were, the greater becomes our grief. Free or not free, such must be the case.

Truly yours,

W. M. LACY.

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AN EXAMINATION
OF
THE PHILOSOPHY OF THE UNKNOWABLE
AS EXPOUNDED BY
HERBERT SPENCER.

CHAPTER I.

THE ISSUE.

Introductory Remarks.

§. 1. CITATIONS to be hereafter made will show that Mr. Spencer holds, and has endeavored to prove, that we can know nothing of the External World, save its bare existence; nothing of Mental Substance, save its bare existence; and nothing of the Intrinsic Nature of mental modes, except that something of the kind exists. Otherwise stated, I conceive the theory to be, that, of reality external to consciousness, nothing but the existence can be known. As stated in still a third form, the doctrine seems to consist in the belief that all without the sphere of consciousness is, in respect of its nature,—that is, the sum of its attributes minus its existence,—absolutely unknowable. Some realization of the equivalence of these three modes of expression is essential to an appreciation of the discussions which are to follow.

To the scheme of nescience, substantially as above set forth, I oppose the doctrine that we are capable of realizing something of the nature of things occupying the region outside of consciousness. It is not meant by this that immediate knowledge of anything not present in consciousness is possible. No one is more firmly convinced than myself that there can be no consciousness, strictly so-called, of what is beyond consciousness.

But that there can be genuine thought of something not within consciousness, is an independent proposition, and the one here urged as true.

It will be perceived, by those who have read thus far, that, as regards the question in dispute, Mr. Spencer is at great disadvantage of position. To the disadvantage necessarily accruing to one who undertakes to establish a contested proposition, there is added, in Mr. Spencer's case, the greater disadvantage inherent in the effort to establish a rule as absolutely without exception. His task is far less arduous whose success is attainable by breaking a single link in a chain of reasoning, or forcing recognition of a single exception to a rule. While, however, it is obligatory upon any one to avail himself, in discussion, of every advantage which he can, in moderate self-gratulation, attribute to the greater justness of the views he has adopted, he should scorn to avail himself of any mere controversial formality. Ours is not the age of quibblings over the "the affirmative" and "the negative;" and no such quibblings shall the reader find. Wherever he finds denial, he shall find affirmation; wherever he finds attempted refutation of an important doctrine, he shall find an endeavor to establish another doctrine in its stead. In this connection it is also well to mention that the dry and rigid epitome, above presented, gives no adequate idea of the entertaining variety of important topics which Mr. Spencer subordinated to his main design. All these are to be drawn into the discussion. To the reader may be promised, therefore, something more substantial than mere logical statement of the issue would lead him to anticipate.

§ 2. The issue is not between Mr. Spencer, on the one hand, and a single opponent, on the other; nor is it of recent advent. "The question of an external world," said Mr. Mill, "is the great battle-ground of metaphysics." Says an eminent contemporary metaphysician: "In this border country there has been a war for ages in the past, and there is likely to be a war for ages in the future." Over all external to consciousness, let us add, the conflict extends, engaging about as many factions as

there are philosophers. Whoever enlists in it will find that the greatest are his allies and the greatest his opponents.

This is, therefore, no attack upon Mr. Spencer personally. He is the most dangerous of adversaries, and one of the most worthy of men. But, as the latest authoritative exponent of a certain philosophic tendency, there is no proper alternative between attacking his reasonings or refraining from the attack. Again, the sentiments here upheld are not peculiar to myself. They are those of a numerous class of enquirers, and are even entertained by mankind at large. It can scarcely be presumptuous to side with so many, although to do so is to decide against the rest. One thing that may seem presumptuous is to risk the defeat which has been repeatedly visited upon the strong. But if the contest is to be continued, and its antiquity and present unsettled state imply that it is, there must be a continual coming of recruits. He who thinks he has novel tactics to try should come forward and give them trial.

§ 3. To the issue, the Doctrine of Evolution is not a party. There is, it is true, a connection between what I have called the "Philosophy of the Unknowable" and the Philosophy of Evolution; but it is not that of foundation and superstructure.

Mr. Spencer has, indeed, prefaced the exposition of his System of Philosophy by a systematic treatise on "The Unknowable;" and he does, moreover, return to the subject again and again throughout his writings, to give his views thereon further expression, elucidation, and confirmation. His theory of knowledge he considers, not a doctrine of metaphysics only, but a biological, psychological, and even a sociological doctrine as well. Under the title of "Transfigured Realism," too, he gives it consideration not otherwise bestowed.

Yet it is not indispensable to the Philosophy of Evolution, but is rather a complication from which that philosophy should be glad to extricate itself. That evolution is only a law of appearances, not a law of things, is a thought fraught with disheartenment and burdened by a weight of complex subtilities. No evolutionist should harbor sentiment repugnant to the tenet

that realities are the subject-matter of the process of evolution and of the Evolution Philosophy. But if he must entertain a prejudice, let it not lead him into suspicion that he hears a voice from the hostile camp. In my own case, at least, I find the fullest acceptance of criticisms to be propounded not incompatible with estimation of the "Synthetic Philosophy" as perhaps the noblest speculative product of a single mind.

CHAPTER II.

A FUNDAMENTAL FALLACY.

The Impossibility of Establishing Unknowableness.

§ 4. ON slightest acquaintance with Mr. Spencer's agnostic conclusions, there is enough to raise the question, How is it possible to establish the proposition that something is unknowable? Accordingly with this question the examination shall begin. Incidentally to the search for an answer, the reader shall be introduced to the whole line of argument which it is my intention to investigate.

The following is an epitome of the treatise on "The Unknowable:" "Common Sense asserts the *existence* of a reality; Objective Science proves that this reality cannot be what we think it; Subjective Science shows why we cannot think of it as it is, and yet are compelled to think of it as *existing*; and in this assertion of a Reality *utterly inscrutable in nature*, Religion finds an assertion essentially coinciding with her own." (First Prin., § 27.)

§ 5. Granting that "Common Sense asserts the existence of a reality," which shall be provisionally called "The Unknowable," we will first enquire in what manner Objective Science is supposed to aid in proving that this reality is so far from being what we think it, that it is "utterly inscrutable in nature." To deduce unknowableness from knowledge of "The Unknowable," would have been absurd, so what doubtless appeared to be an alternative method was adopted. It seemed to Mr. Spencer that if successful in showing that every idea, vulgarly supposed to be representative of the nature of "The Unknowable," conflicts with itself, he would have the testimony of Objective Science in support of his position. Pursuant to such

view, he makes an attack upon all possible conceptions of the Origin of the Universe. These, if he commits no error, are demonstrated self-conflicting. Next, he grapples with the mental representation of Causation, and brings it before us, denuded of obscurity, that Mansel may point out its self-opposing tendencies. This disposition of "Ultimate Religious Ideas" being made, "Ultimate Scientific Ideas" are treated in a similar manner. The notions expressed by the terms, "Space," "Time," "Matter," "Motion," "Force," "Extent of Consciousness," and "Mental Substance," are severally examined for the purpose of showing that each, when expanded, combats itself.

We can afford to be very generous with Mr. Spencer. Let it, for experiment, be conceded that he has been entirely successful in showing, that what we have heretofore deemed knowledge of "The Unknowable," the knowledge that it exists excepted, "proves on examination to be utterly irreconcilable with itself." (First Prin., § 22.) Nevertheless a gap effectually separates the premise from the conclusion. A certain portion of the universe was to be proved unknowable. Our ideas of it are, with one exception, shown to be utterly incongruous. The conclusion is, that there is a total non-resemblance between these ideas and the part of the universe in question. But what shall be said to the polemic who will argue that this, the so-called "Unknowable," may, in exact correspondence with what have been esteemed its representatives in the world of mind, sustain necessary conflicts among its parts? Worse than hopeless would it be to rely upon the declaration that it is impossible to pronounce this assertion true or false; for, if its falsity is not known, none can deny its truth; and if true, "The Unknowable" is known. Of one defence, and one only, can Mr. Spencer avail himself. He must maintain that "The Unknowable" is free from the conflicts which overwhelm the ideas commonly thought to represent it—that the notion of its self-consistency is as legitimate as the notion of its existence. The defence, that existence involves self-consistency, is not open to him; because he denies this in the case of the contested ideas. Such an inconsistency as the ideas have, may realities be sup-

posed to have, unless the contrary be shown. Understand that if the proposition missing from Mr. Spencer's argument is implied, he has not only affirmed of "The Unknowable" a general and abstract consistency, but also denied that it possesses any of a multitude of special and concrete inconsistencies. Every time he showed, or tried to show, us an imperfection in the ideas which he impugned, he said, by implication, "The Unknowable is not subject to an imperfection answering to this one." Justice will be done if he be permitted to speak his own accusation. "In all imaginable ways we find thrust upon us the truth, that we are not permitted to know—nay are not even permitted to conceive—that Reality which is behind the veil of Appearance; and yet it is said to be our duty to believe (and in so far to conceive) that this Reality exists in a certain defined manner." (First Prin., § 31.) The "certain defined manner," in the case before us, is the possession of congruity and the freedom from certain incongruities.

Thus it appears that the first proof that something is unknowable, rests on the supposition that more of it than its existence is known. Of course all would more willingly hear "The Unknowable" called congruous than incongruous. It is not this description, but the name and something said to justify its application, to which objection is made. That the objection has been sustained by criticism, that there has been discovered, in the reasoning of Mr. Spencer, a difficulty from which he cannot extricate himself, they who still doubt may satisfy themselves by considering what answers he can offer to the question, Is the unknowable portion of the universe a chaos corresponding to that mental chaos which you tell us our thoughts of something beyond the knowable compose? Refusing to answer, he would abandon his argument. Should he say "yes," he would deny his conclusion. Should he say "no," he would be thereby debarred its affirmation. He must answer to avoid a surrender; yet any answer will defeat his cause.

§ 6. Although Objective Science has just taught us, by its example, to think of the inscrutable reality as congruous, we

are now to learn how "Subjective Science shows why we cannot think of it as it is." Reduced to syllogistic form, the argument to be next investigated seems, a minor premise being supplied, to stand thus:

There can be no knowledge of what is unconditioned;

"The Unknowable" is unconditioned;

∴ There can be no knowledge of "The Unknowable."

To which, one objection is that the minor premise destroys the conclusion. Asserting that "The Unknowable" is unconditioned, carries the implication that it is known to be unconditioned. Lest it be thought unfair to present so briefly an elaborate argument, and particularly unfair to summarily supply a minor premise, it will be well to go further into detail. First, however, it must be premised that the author has, because of supposed appropriateness, given to "The Unknowable" several titles, not yet mentioned, each of which is significant of a part of what is imported by "unconditioned,"—significant of the absence of certain particular conditions.

Assisted by Hamilton and Mansel, Mr. Spencer, in the chapter entitled "The Relativity of All Knowledge," puts forth considerable effort to convince us that "a thought involves *relation, difference, likeness*." (First Prin., § 24.) By this is meant that every thought involves a *relation* of subject and object; also a *difference* and a *likeness* between the object and something else. So much being granted, it would follow that whatever cannot exist in relation to the thinking mind, and be known as different from something else, and as like something else, cannot be thought of at all. Because seeming not to fulfill the specified conditions of the thinkable, "the Real, as distinguished from the Phenomenal;" "the First Cause;" "the Infinite;" "the Absolute," or non-relative; "the creating;" "the uncaused;" "the Actual," as opposed to the "Apparent"—in short, "the Unconditioned"—is pronounced unthinkable, and the conclusion that "The Unknowable" can never be an object of thought is treated as too obvious to need definite expression.

From his own words we may best learn how Mr. Spencer

passes to the ultimate conclusion from the law of relativity. After quoting largely to show that "the Unconditioned" has been put to the first and second tests and found unthinkable, he proceeds (First Prin., § 24) to apply the third axiom—what can be known can be classed. "A cognition of the Real, as distinguished from the Phenomenal, must, if it exists, conform to this law of cognition in general. The First Cause, the Infinite, the Absolute, to be known at all, must be classed. To be positively thought of, it must be thought of as such or such—as of this or that kind. Can it be like in kind to anything of which we have sensible experience? Obviously not. Between the creating and the created, there must be a distinction transcending any of the distinctions existing between different divisions of the created. That which is uncaused cannot be assimilated to that which is caused: the two being, in the very naming antithetically opposed. The Infinite cannot be grouped along with something that is finite; since, in being so grouped, it must be regarded as not-infinite. It is impossible to put the Absolute in the same category with anything relative, so long as the Absolute is defined as that of which no necessary relation can be predicated. Is it then that the Actual, though unthinkable by classification with the Apparent, is thinkable by classification with itself? This supposition is equally absurd with the other. It implies the plurality of the First Cause, the Infinite, the Absolute; and this implication is self-contradictory. There cannot be more than one First Cause; seeing that the existence of more than one would involve the existence of something necessitating more than one, which something would be the true First Cause. How self-destructive is the assumption of two or more infinities, is manifest on remembering that such Infinities, by limiting each other, would become finite. And similarly, an Absolute which existed not alone but along with other absolutes, would no longer be an absolute but a relative. The Unconditioned therefore, as classible neither with any form of the conditioned nor with any other Unconditioned, cannot be classed at all. And to admit that it cannot be known as of such or such kind, is to admit that it is unknowable." A few

words more, and the entire argument is thus summarized and ended: "a thought involves *relation, difference, likeness*. Whatever does not present each of these does not admit of cognition. And hence we may say that the Unconditioned, as presenting none of them is trebly unthinkable."

What, if we assent to all this, does it establish in regard to "The Unknowable?" A multiplicity of names, signifying the possession of certain characteristics, has been given to it; and these characteristics have, it is thought, been proved incognizable. Does "The Unknowable" possess these characteristics? is now the all-important question. To profess ignorance, is to yield the argument. To deny, is to leave a gap in the argument and violate the conclusion. To affirm, is to complete the argument by violating the conclusion. Mr. Spencer has indicated a willingness to seize the last horn of the trilemma. By indulging in reasoning which postulates such knowledge, he has asserted that "The Unknowable" is real (not phenomenal), a first cause, infinite, absolute (non-relative), creating, uncaused, actual (not apparent): in brief, unconditioned. Surely this is an amount of information which we do not possess concerning many things that are called knowable. Not yet, however, have the limits been reached. All that has been affirmed of that possessing its alleged attributes, has been affirmed of "The Unknowable." It is, we are to understand, of such a nature that it cannot exist in relation to the knowing mind. In other words, we know "The Unknowable" as so conditioned that it is incapable of that relative existence without which any knowledge of it is impossible. Add to the intelligence already accumulated the knowledge that "The Unknowable" is neither like nor unlike anything else existing; and consider the numberless implications which might be developed and added to the sum. Should not "The Unknowable" be called by another name? Mr. Spencer must answer affirmatively or disavow many beliefs essentially implied in his mode of proof; but in the latter case he has proved nothing in regard to "The Unknowable." What matters it, as far as the question before us is concerned, whether a long list of attributes is conceivable or inconceivable, if they

are not known to belong to "The Unknowable?" Admit that "The Unknowable" is not known to be unconditioned, and we care not if "the Unconditioned" is unthinkable. Concede it impossible to say knowingly that "The Unknowable" has peculiarities which must forever prevent its existing relative to something knowing it, and in relations of likeness and unlikeness, and it will be necessary to consider all that has been so far said about the relativity of knowledge utterly irrelevant. Ineffective from end to end is the argument, unless the thought that "The Unknowable" is unconditioned, is as legitimate as the thought that it exists.

§ 7. Notwithstanding the premise, above implied, and elsewhere repeatedly expressed, that "The Unknowable" transcends all relation, we are now to be shown how it is related to the mind; and the purpose is to farther convince us that "we cannot think of it as it is." From a point of view widely separated from that which he lately occupied, Mr. Spencer, in additional support of his theory of the unknowableness of something which exists, directs our attention (First Prin., § 25) to what purports to be the relativity of knowledge presenting another aspect. "Life," he says, "is definable as the continuous adjustment of internal relations to external relations." "If then," he argues, "Life, in all its manifestations, inclusive of Intelligence in its highest forms, consists in the continuous adjustment of internal relations to external relations, the necessarily relative character of our knowledge becomes obvious." "If every act of knowing is the formation of a relation in consciousness parallel to a relation in the environment, then the relativity of knowledge is self-evident—becomes indeed a truism." Judging from what has been cited, one might be led to suppose that the relativity spoken of consists of relations between phenomena, relations between noumena, relations between phenomena and noumena, and relations between phenomenal and noumenal relations. Taking, however, all that is said into consideration, the meaning seems to be, that only phenomenal relations, or relations in consciousness, can ever come "within

the reach of intelligence;" and that the impossibility of transcending these relations proves noumena and their relations unknowable. Witness the following: "The knowledge within our reach, is the only knowledge that can be of service to us. This maintenance of a correspondence between internal actions and external actions, which both constitutes our life at each moment and is the means whereby life is continued through subsequent moments, merely requires that the agencies acting upon us shall be known in their co-existences and sequences, and not that they shall be known in themselves." Remarks immediately following show this to mean that the necessities of life require a knowledge, not of noumena, but merely of the co-existences and sequences of the effects which noumena produce in consciousness. "If x and y are two uniformly connected properties in some outer object, while a and b are the effects they produce in our consciousness; and if while the property x produces in us the indifferent mental state a , the property y produces in us the painful mental state b (answering to a physical injury); then, all that is requisite for our guidance, is, that x being the uniform accompaniment of y externally, a shall be the uniform accompaniment of b internally; so that when, by the presence of x , a is produced in consciousness, b , or rather the idea of b , shall follow it, and excite the motions by which the effect of y may be escaped. The sole need is that a and b and the relation between them, shall always answer to x and y and the relation between them. It matters nothing to us if a and b are like x and y or not. Could they be exactly identical with them, we should not be one whit the better off; and their total dissimilarity is no disadvantage to us." Immediately after comes the conclusion of the argument. "Deep down then in the very nature of Life, the relativity of our knowledge is discernible. The analysis of vital actions in general, leads not only to the conclusion that things in themselves cannot be known to us; but also to the conclusion that knowledge of them, were it possible, would be useless."

What has all this to do with "The Unknowable?" Are we to understand that it is believed to comprise "things in them-

selves" which are known to be so constituted and connected with consciousness that a knowledge of their nature would not enable us to better procure the desirable and avoid the undesirable effects which they may produce upon us? Silence on Mr. Spencer's part means death to the argument; negation, abortion; affirmation, self-destruction. Implicitly he affirms. "In the very definition of Life," he tells us, "when reduced to its most abstract shape," the "ultimate implication becomes visible." According to this definition, Life is "the continuous adjustment of internal relations to external relations." Because in this view of life is involved the belief that "every act of knowing is the formation of a relation *in* consciousness parallel to a relation in the environment," it is deemed beyond dispute that the mind can and need contemplate relations in consciousness only, and that therefore the environment is unknowable. But stop: it is impossible to realize that life is "the continuous adjustment of internal relations to external relations," or that "every act of knowing is the formation of a relation in consciousness parallel to a relation in the environment," without forming a relation in consciousness that is not *parallel* to a relation *in* the environment, but *representative* of a relation *between* the environment and the environed mind. Now, as in the author's words, "the consciousness of a relation implies a consciousness of both the related members" (First Prin., § 26), the knowledge of a relation between them proclaims the mind and its environment knowable and known. "In the very definition of life," then, as in everything which we have found Mr. Spencer employing for the same purpose, "this ultimate implication becomes visible"—the nature of "The Unknowable" is partly known. Besides being known as one of the terms of a certain kind of relation, it is, according to implications of remarks concerning the necessities of life, minutely understood. Knowing that promotion of life "merely requires that the agencies acting upon us shall be known in their co-existences and sequences, and not that they shall be known in themselves"—that the record of past manifestations of "The Unknowable" will just as well enable us to regulate the character of future manifesta-

tions, as would a perfect understanding of "The Unknowable" and all the relations which it may possibly bear to us—is impossible unless "The Unknowable" is exceedingly well known. Repeatedly we discover the one unlawful implication. Again Mr. Spencer has thwarted his own design.

§ 8. With the assertion that we cannot think of "The Unknowable" as it is, fresh in our memory, we are called upon to listen to an argument, supplementary of those preceding, yet based on the supposition that we may rightly think of it as a cause.

An entire chapter (First Prin., Part I., Chap. I.) is devoted principally to establishment of the doctrine that "there must be a fundamental harmony" between Science and Religion; and another (First Prin., Part I., Chap. V.) to showing that this fundamental harmony is to be found in the conclusion that "the reality underlying appearances is *totally* and *for ever* inconceivable by us." The former chapter is almost unobjectionable; the latter is open to destructive criticism. In it we are told that in the "assertion of a Reality utterly inscrutable in nature, Religion finds an assertion essentially coinciding with her own;" and this is what we question. How Science, represented by Mr. Spencer, proves the conclusion which is to end the war between Scientists and Religionists, by contradicting it,—how she uncovers something, to show it to be totally and eternally hidden from our view, has been observed. Forgetting this, as best we may, let us suppose that Science supports the conclusion that promises to harmonize her and her great antagonist. Will religious thought tend to the acceptance of the same belief?

Religion is represented as having been forced to abandon position after position, retreating before advancing Science, until the impregnable point, the ultimate conclusion, was reached. "Leaving out the accompanying moral code, which is in all cases a supplementary growth, a religious creed is definable as a theory of original causation." (First Prin., § 14.) As religions developed, existing theories of causation gave way to others. "Each higher religious creed, rejecting those defi-

nite and simple interpretations of nature previously given, has become more religious by doing this. As the quite concrete and conceivable agencies alleged as the causes of things, have been replaced by agencies less concrete and conceivable, the element of mystery has of necessity become more predominant." (First Prin., § 28.) "And now observe that all along, the agent which has effected the purification has been Science." (First Prin., § 29.) Here we must pause to consider of what the alleged development consists. It is asserted that Religion, pressed by Science, has, from time to time, abandoned causes relatively conceivable and assumed causes less conceivable. Note that Religion is not shown to have ever given up the hypothesis of causation. That the contrary is true, we are frequently reminded. Defining religious creeds as theories of original causation, is the same as affirming that they will be something else than religious creeds when they exclude belief in a cause. What says the author? "Be it in the primitive Ghost-theory which assumes a human personality behind each unusual phenomenon; be it in Polytheism, in which these personalities are partially generalized; be it in Monotheism, in which they are wholly generalized; or be it in Pantheism, in which the generalized personality becomes one with the phenomena; we equally find an hypothesis which is supposed to render the universe comprehensible. Nay, even that which is commonly regarded as the negation of all Religion—even positive Atheism, comes within the definition; for it, too, in asserting the self-existence of Space, Matter, and Motion, which it regards as adequate causes of every appearance, propounds an *a priori* theory from which it holds the facts to be deducible." (First Prin., § 14.) Elsewhere, as well as here, the assertion is withheld, that Religion has consented, or will consent, to dispense with all causes. No more is said than that "instead of the specific comprehensible agency before assigned, there is substituted a less specific and less comprehensible agency." (First Prin., § 29.) Could any doubt in regard to Mr. Spencer's meaning remain, it would be dispelled by the words of the alleged ultimate religious conclusion. To this we now pass.

"We are obliged to regard every phenomenon as a manifestation of some Power by which we are acted upon; though Omnipresence is unthinkable, yet, as experience discloses no bounds to the diffusion of phenomena, we are unable to think of limits to the presence of this Power; while the criticisms of Science teach us that this Power is Incomprehensible. And this consciousness of an Incomprehensible Power, called Omnipresent from inability to assign its limits, is just that consciousness on which Religion dwells." (First Prin., § 27.)

Science proves that there is "a Reality utterly inscrutable in nature." Religion teaches us to believe that there is an agency producing all the phenomena we know, the cause of all known effects, a never-absent power. Mr. Spencer informs us that here is an agreement between Science and Religion: which means that "The Unknowable" of Science and the Cosmical Cause of Religion are identical. In the "assertion of a Reality utterly inscrutable in nature, Religion finds an assertion essentially coinciding with her own." Once more we learn much about "The Unknowable." It is an ever-present power, a universal cause, an all-working agency. Admit this, and it is possible to partially describe a nature called wholly indescribable, to conceive a nature said to be wholly inconceivable, and to know a nature deemed absolutely unknowable; deny it, and Religion does not contribute to the belief in something unknowable. Even supposing that both Science and Religion were, as alleged, moving towards this belief, the fact is useless for the purposes of the argument unless a certain correspondence between the general tendency of thought and "The Unknowable" be assumed; but, again, to so assume, is to assume knowledge which the assumption is to prove impossible.

§ 9. Every leading argument by which Mr. Spencer attempts to enforce acceptance of the conclusion, "*that we cannot know the ultimate nature of that which is manifested to us,*" (First Prin., § 35) has now been considered. Examining the conclusion itself, none can fail to notice the fatal implication—we do know something of the ultimate nature of that which is manifested

to us. Strike out everything descriptive of the ultimate nature of "The Unknowable," and, having substituted something which will (as nearly as is possible) convey the idea of existence only, observe what is left of the conclusion. We must drop the words, "that which is manifested to us;" for by describing "The Unknowable" thus, we imply that it is properly conceived, not merely as something capable of producing phenomena, but also as something that actually causes certain well known effects. Neither can "the ultimate nature" of "The Unknowable" be spoken of: the possession of a noumenal nature, by an object, is something belonging to its noumenal nature; without doubt, then, we cannot speak of anything's noumenal nature without implying some knowledge of the same. Supplying the proposed substitute for what criticism compels us to exclude, the conclusion stands—"We cannot know something which exists." Still it is suicidal. Denial that we can know something, is both a denial that it can exist in a certain relation to the mind and an affirmation that it must bear to the mind an opposite relation; therefore the phrase, "we cannot know," must be stricken out. There is left, not a conclusion, but what may be called by the more general name, "conception"—the conception of something existing. Such is the only thought that can be entertained of what is "utterly inscrutable in nature;" and it is a thought which does not express unknowableness, but consists with the reverse. Some such modifications as those which have been dropped are essential to Mr. Spencer's conclusion; yet any, however vague, would render that conclusion self-contradicting. Without them, there is no conclusion; with them, there is worse than none.

§ 10. "Have we not," Mr. Spencer confidently asks (First Prin., § 31), "seen how utterly incompetent our minds are to form even an approach to a conception of that which underlies all phenomena?" It seems not. An attempt to translate the conclusion into thought has confirmed us in the observation that, "after it has been shown that every supposition respecting the genesis of the Universe commits us to alternative impossi-

bilities of thought—after it has been shown that each attempt to conceive real existence ends in an intellectual suicide—after it has been shown why, by the very constitution of our minds, we are eternally debarred from thinking of the Absolute; it is still asserted that we ought to think of the Absolute thus and thus.” (First Prin., § 31.) Throughout we have found reason for believing that Mr. Spencer’s Science of Nescience, as he says of the religion which is, he thinks, ultimately to support it, “has all along professed to have some knowledge of that which transcends knowledge; and has so contradicted its own teachings. While with one breath it has asserted that the Cause of all things passes understanding, it has, with the next breath, asserted that the Cause of all things possesses such or such attributes—can be in so far understood.” (First Prin., § 28.) Yes, it will even, as was seen before, consent to call that which transcends knowledge “the Cause of all things;” not realizing that power to cause, acts of causing, and the bearing of relations of universal cause to numberless effects, are attributes. The philosophical dissertation which we have casually surveyed, while seeming with loud voice to banish “The Unknowable” from the realm of speculation, silently acknowledges its title to a place in philosophy. The abstract truth that we cannot reason about that of which we know nothing, it seems, occurred to Mr. Spencer; but it appears that he took no pains to determine just *what* knowledge was required to prove his particular proposition. He would have us observe, “that every one of the arguments by which the relativity of our knowledge is demonstrated, distinctly postulates the positive existence of something beyond the relative. To say that we cannot know the Absolute, is, by implication, to affirm that there *is* an Absolute. In the very denial of our power to learn *what* the Absolute is, there lies hidden the assumption *that* it is.” (First Prin., § 26.) But care has been taken to show that the ultimate proposition concerning “The Unknowable” is without meaning and without support, unless we know, not only that something besides the knowable *is*, but also, to some extent, *what* it is. It is admitted that we are compelled to form representations of “The Un-

knowable" which are not representative of its existence only; but asserted that all such conceptions must be treated as entirely illusive. "Very likely there will ever remain a need to give shape to that indefinite sense of an Ultimate Existence, which forms the basis of our intelligence. We shall always be under the necessity of contemplating it as *some* mode of being; that is—of representing it to ourselves in *some* form of thought, however vague. And we shall not err in doing this *so long as we treat every notion we thus frame as merely a symbol utterly without resemblance to that for which it stands.* Perhaps the constant formation of such symbols and constant rejection of them as inadequate, may be hereafter, as it has hitherto been, a means of discipline. Perpetually to construct ideas requiring the utmost stretch of our faculties, and perpetually to find that such ideas must be abandoned as futile imaginations, may realize to us more fully than any other course, the greatness of that which we vainly strive to grasp." (First Prin.. § 31.) Treat every notion of "The Unknowable" which has been found in Mr. Spencer's speculations, as "a symbol utterly without resemblance to that for which it stands," and you will be obliged to consider his exposition of the Philosophy of The Unknowable as among the most remarkable of intellectual suicides. Having formed illegitimate symbols, they may with advantage, it is true, be sometimes permitted to enter into our reasonings; but when the intellectual gymnastic is completed by their rejection, all that depends upon them for its acceptance must be rejected too. As yet, we have had no proof that a certain portion of the universe is unknowable; for, if all our ideas of it "must be abandoned as futile imaginations," then must Mr. Spencer's nescience theory be abandoned as unproved and unthinkable.

§ 11. Many flaws in Mr. Spencer's reasoning have been ignored in order to bring out more clearly an ever-recurring error, which, of itself, is sufficient to render nugatory his entire contribution to the doctrine of nescience. The establishment of a broader truth than any yet reached was also contemplated. What we have learned is of more value to phil-

osophy than it has heretofore seemed to be, if it has prepared us for the apprehension of the fact that failure *must* be the result of every attempt to prove that something is unknowable — can be known only to exist. Two considerations, each of which is alone adequate, combine to force this conclusion upon us: (1.) It is impossible to construct an argument which shall, without disabling itself, lead to the required conclusion; and (2.) It is impossible to realize the conclusion in thought. Taking these propositions in their order, we will turn our attention to their substantiation.

Nothing can be shown in justification of a belief, except that it is agreeable, or that an opposing belief is repugnant, to something which is held to be true. A conclusion, then, which denies, in its own case, the validity of such justification, makes every argument in its own support self-destructive. Such is the conclusion that something is unknowable. If we know nothing of "The Unknowable" but that it exists, we are not entitled to the postulate that there is congruity among its parts and between it and its opposite, the knowable. Precluded the assertion of this congruity, we cannot say that our legitimate thoughts of "The Unknowable" should harmonize with each other or with our thoughts of the knowable. That the proposition, expressing what we are permitted to think of "The Unknowable," is consistent and agrees with truth in general is, therefore, no reason for believing it true. Can its truth be proved by showing that a contradictory proposition is inconsistent, and otherwise does violence to truth? No; because this last proposition declares something of "The Unknowable," and therefore, may be in so far true, no matter how great the inconsistency which its acceptance would occasion. Anything may with impunity be declared of "The Unknowable." Were it even possible to show the belief in something unknowable to be intuitive, it would be useless to do so: "The Unknowable" cannot be known to be in harmony with the intuitive powers.

The first obstacle lost sight of, another arises before us. Expressed or implied, an inference must be drawn from premises. Our conclusion asserts that something is unknowable. As we

cannot argue that the something is unknowable because it is unknowable, we must declare of it something, not unknowableness, which is a sign of unknowableness. Only one declaration besides that of unknowableness will our conclusion permit us to make; that is, that the something exists. Thus we have as a premise, "The something exists." This, which we see is a minor premise, will aid in finding the major. Unless the major premise predicates something of whatever exists, the minor is irrelevant; and if anything other than unknowableness is predicated, the conclusion does not follow. The only possible major premise then is, "Whatever exists is unknowable." The minor is, "The something exists." And the conclusion is "The something is unknowable." Now, one of two results must appear: either the major premise is wrong, and we have proved nothing; or it is right, and everything is unknowable, one thing no more than another. The existence of something is the *datum* from which its unknowableness is to be deduced. Some addition may be made to the *datum*; but not without professing more knowledge of the something than its existence, and thus assuming premises which the conclusion will destroy. Without such addition, the *datum* is insufficient, unless whatever exists is unknowable; but if existence is a sign of unknowableness, many things unknowable are known, and the particular something may be one of them.

Before the attempt was made, we might have known the impossibility of reasoning about that of which no notion can be formed. Our reasoning was, by supposition, concerning something; and we called it *the* something to distinguish it from other things. This we had no right to do; since, until the conclusion was reached, we were not permitted to know that it differed from anything else existing. If, therefore, we really reasoned about something, it may have been anything—it may have been, *e. g.*, an appearance. The nearest approach to a notion of that of which the conclusion makes a declaration, that may be consistently formed, is a notion of its existence. Not a notion of *its* existence, however, for this again implies a distinction; but a notion of unqualified existence. But if the

notion contain nothing besides existence, our reasoning will apply to all existence, and our conclusion will be in regard to existence, and not something, not existence, which we wish to prove unknowable. All that can be done to complete the notion the conclusion will undo.

Already the unthinkableness of something unknowable begins to emerge. "The Unknowable" is that of which nothing but the existence can be known. How any existence can be known separate from something to which it belongs, need not be asked. It is sufficient that if we contemplate existence wholly apart from other attributes, we cannot say to what it belongs, and have no reason to say that it does not belong to this or that which we know.

Although it is that of which nothing but the existence can be known, "The Unknowable" is that of which everything besides the existence is known to be not, in any measure, knowable. Notwithstanding the great discrepancy between these definitions, the latter is deducible from the former, and they contain the same element of incongruity. Unknowableness is an attribute which no one will identify with existence. When unknowableness is ascribed to an object, therefore, something more than existence is affirmed of it. To do this is improper if the object is really unknowable to such an extent as is alleged. Nor is unknowableness entirely a negative attribute. Volumes might be filled with an elaboration of the knowledge of an object which is inferable from its unknowableness. We might compare the object with all imaginable things, one by one, and each time say, "It is unlike *this*." It is throughout uniform and unchangeable in respect of its unknowableness. So strangely is it constituted that whatever there is of it besides its existence can never be presented to us, or be in the least degree represented by any conception we are able to form. The number of such deductions is limitless; one would work destruction to the conception of "The Unknowable."

Definitions of "The Unknowable" imply that it is divisible into two parts—the part known, or its existence; and the part absolutely unknowable, or what belongs to it besides existence.

The whole is called unknowable, because so little of it can be known; the existence is called the known part, because it is the only part known; that to which the existence belongs is called the absolutely unknowable part, because of it nothing whatever can be known. Yet it is contradictory to say that there is something of which we know absolutely nothing; for the assertion implies a knowledge of this something's existence. Though the conclusion that what was called "the absolutely unknowable part" is not quite absolutely unknown, is thus forced upon us, it will be found as objectionable as the opposite conclusion would be. We now know the existence of "The Unknowable," and also the existence of one of its parts. Can the existence of the whole and the existence of the part be distinguished, one from the other? If they can, we are capable of observing differences between the whole and parts of "The Unknowable." If they cannot, we are unable to tell whether it is the existence of the whole or the existence of the part which we know: if it be the existence of the part, the existence of "The Unknowable" is unknown, and, on the same principles, the existence of the part, or of a part's part, *ad infinitum*, is unknown; if it be the existence of the whole which alone is known, we have returned to an absolutely unknowable part, which is the absurdity with which we set out.

Again; "The Unknowable" embraces existence and something else. This time we will leave out of consideration the incongruity of saying that we do or do not know the existence of the something else. Without doubt, the something else must be distinguished from the existence which we know; and if so, we know more than such existence. If we do not know more than the existence, if we do not know that there is something joined to the existence, which we distinguish from it; we do not know that "The Unknowable" contains anything besides existence, we do not know that there is anything belonging to it which is not known.

A very formidable trilemma confronts all who proclaim that there is something unknowable. Excepting a very few propositions, they can affirm of it nothing, they can deny of it

nothing; but they cannot refuse to either affirm or deny any proposition concerning it. "Is it like *this*?" (which we know), we ask them. They cannot say "yes," without asserting a likeness, or "no," without asserting an unlikeness, between "The Unknowable" and something known; yet if they say that they do not know how to answer, they confess that "The Unknowable" may be in nature like something known—that it may be in so far knowable.

Aside from the inconceivableness of an unknowable, the conclusion that there is such a thing is unlawful. He will make the best use of an illegitimate conception, who shall assert that if there is anything unknowable, the fact itself can never be discovered. This averment may be explained and justified by saying that what is unknowable is, its existence excepted, *ex hypothesi*, entirely unknown; but if so unknown, it is impossible to ascertain whether it is unknowable or merely unknown.

§ 12. The considerations which men put forth for the conviction of others are commonly not those upon which they, for their own conviction, principally rely. So it may have been in the present instance. The unquestionable legitimacy of the thought that something is unknown may have been deemed to bespeak the legitimacy of the thought that something is unknowable. Knowing beyond knowledge seems to be involved in both until we enter into particulars, when the apparent analogy fades away. In the case of the unknown we do not think more than our conclusion permits us to conceive. Thinking that the exterior appearance of my friend's house is unknown to me, I both conceive that appearance and conceive it as unknown. The conception I form is vacillating, and because of this I affirm ignorance. A variety of conceptions float through my mind; yet I cannot pronounce the reality like this, or this, or this. Contemplating one representation, I can conceive that the reality is, in each particular, like this or unlike it; contemplating more than one representation, I can conceive that the reality is, in each particular, most like this, or most like that. My

inability to decide which, is my ignorance of something that I conceive. When I see the house, my conception will become constant: then I will conceive affirmatively what I now conceive in the alternative: then I will know as real what I now represent as doubtful, as unknown. If I find that I have represented very little, the implication will be, not that I knew as unknown more than I could represent, but that I knew very little as unknown. "The Unknowable" has no similar means of finding representation. A vacillating conception cannot exhibit its relation to cognition; not alone because it cannot be viewed in relation, but also because no element in conception can, even provisionally, for an instant represent it. The inability applies to anything essentially beyond knowledge, whether it extend throughout only a part of externality, instead of the whole; whether it consist of an attribute of an attribute, instead of all attributes but one.

Deprived of an essentially unknowable, its worshipers will have at least an unknowable which is necessarily such. Regretfully, but with confidence, they will accept this as their cry: "Information, however extensive it may become, can never satisfy inquiry. Positive knowledge does not, and never can, fill the whole region of possible thought. At the uttermost reach of discovery there arises, and must ever rise, the question—What lies beyond? As it is impossible to think of a limit to space so as to exclude the idea of space lying outside that limit; so we cannot conceive any explanation profound enough to exclude the question—What is the explanation of that explanation? Regarding Science as a gradually increasing sphere, we may say that every addition to its surface does but bring it into wider contact with surrounding nescience." (First Prin., § 4.) There is no longer, to the Realist, terror in the cry. The nescience which we must ever recognize is not of the quality which Mr. Spencer seeks to prove. Out beyond the known we see the unknown; but it is not a bare existence to us. Slowly and with trembling thought, we magnify and multiply its attributions. No part of it do we know as absolutely unknown; to no particular part can we point and say, "that never will be better known."

Many of Mr. Spencer's admirers believe that he has taught them what can be known and what cannot. The arbitrary line which he attempted to draw between possible knowledge and necessary nescience, they did not see him cross. Yet he did cross it, and was compelled to cross it, to obtain *data* to support the belief that it is impossible to be crossed. Encouraged by his example, others may attempt to cross at the same and other points, in the prosecution of other aims. His reasoning was general; having, it was supposed, equal applicability to the whole line which forms the circumference of consciousness. Till he has shown us that the points where he breaks through are weaker than others, we may doubt the strength of all; and could we be repulsed at other points, where he has passed through we would assert our right to follow.

§ 13. Seeing that the conclusion, lately in discussion, is unthinkable, and that it vitiates every argument from which it can be supposed to derive support, we are prepared to go a step further. Whenever a logically constructed argument leads to an illegitimate conclusion, it is competent to foretell that the premises will prove faulty. Who thus predict in Mr. Spencer's case will realize their expectation.

CHAPTER III.

THE INDUCTIVE ARGUMENT.

Origin of the Universe; Causation.

§ 14. THE reader will remember Mr. Spencer's first argument: it purports to deal with all ideas of "The Unknowable," and to prove, by experimenting with them, that they are wholly spurious.

Were defences scarce, I would dwell at length upon the fact that most of such ideas have been left entirely out of mind. The conceptions, and the only ones, from experiment with which Mr. Spencer has drawn his induction, are those of the Origin of the Universe, Causation, Space, Time, Matter, Motion, Force, Extent of Consciousness, and Mental Substance. That these do not comprehend all thoughts of things outside of consciousness, may be very readily shown by calling attention to some such thoughts. We think we recognize, in externalities, homogeneity and heterogeneity; and a surrender of this belief would not necessarily accompany a surrender of the ideas above enumerated; for likeness and unlikeness of parts is an abstraction which we could easily attach to "Unknowable Existence." So also, be it observed, are the abstractions, substance and attribute, number and figure, whole and part. Of some attributes, after saying so much, we may say much more—we may add that they have been transferred to "The Unknowable" by Mr. Spencer. He implies that it possesses quantity, when he calls it "infinite" or "unlimited;" he attributes to it mobility, when he describes it as acting upon us; and allows it congruity, in a manner before remarked. Now we may profitably enquire into the distinction between what Mr. Spencer attempted and what he improperly ignored. He dealt with externalities in the particular, rather than in the

general; in the concrete, rather than in the abstract. The Origin of the Universe, Extent of Consciousness, and Mental Substance are obviously very particular, very concrete. Causation, Space, Time, Matter, Motion, and Force are truly abstractions; but they do not compare in degree of abstractness with other notions mentioned; indeed some of them, and to some degree all of them, may be, and are, considered things. Compare the assailed conceptions with the notions, of homogeneity, heterogeneity, whole, part, quantity, congruity, and the like: these represent attributes common to them all and are therefore abstractions higher than them all.

The importance of the distinction lies in the fact that the abstraction is more general than the particulars from which it is taken—involves a greater number of experiences. Abstractions formed by the sifting and combining of many experiences are doubtless more reliable than those formed by the sifting and combining of a few. Thus we reach the conclusion that the most general conceptions of externalities may not be proved illusive by proving the illusiveness of the less general notions from which they have, to a considerable extent, been drawn.

Besides difference in respect of generality, there is another difference, above suggested, which if analyzed will lead us to the same conclusion. To conceive the Origin of the Universe, or Space, or Mental Substance, for instance, it is necessary to represent a definite combination of various attributes; whereas such a conception as that of conditionality is both extremely simple and unrestricted to any very particular form. Considering the immense difference in the conditions they should fulfill, it is evident that the one class of conceptions may be almost entirely spurious while the other is almost entirely true.

The replies which it may be supposed Mr. Spencer could make to the foregoing may be met by the observation, that we shall find him employing the distinctions here drawn, and in a like manner, for a like purpose. We shall find him arguing that the existence of "The Unknowable" is of the utmost certainty because it is an abstraction derived from *all* thoughts and experiences of externalities—thoughts and experiences which are, except

as respects existence, totally delusive. And we shall find him arguing that, although definite conceptions of "The Unknowable" must be renounced, we are nevertheless obliged to treat the unformed sense of its existence as completely reliable. We have merely applied the same line of argument to abstractions intermediate between the notion of existence, which is of the highest abstractness, and certain abstractions, dealt with by Mr. Spencer, which are, as abstractions, relatively low. Not that there are no abstractions, (for relationship is one), that are as high as existence; but the intermediate abstractions are so much more numerous as to preponderate in importance. To all these the induction should have extended: inasmuch as it ignores them, it is deficient.

Were defences scarce, I would also enter into a detailed criticism, intended to show that besides not drawing his induction from experiments with all ideas of "The Unknowable," he has not, even if his attacks cannot be repelled, shown, by experiment, the entire illusiveness of one. It is often inadvertently assumed by Agnostics, and inadvertently conceded by Realists, that the partial reliability and partial delusiveness of ideas is in some way inconsistent with Realism. An application of the principles of evolution would drive from speculation a supposition so manifestly repugnant to them. From a realistic stand-point it is supposable, nay, almost certain, that ideas may be legitimate for some purposes, but not for others. They may in part represent, and in part misrepresent realities; or they may represent realities, when they are vague and connote little, and misrepresent the same realities, when, expanded into definiteness, they connote much. The attributes best represented are probably, on the whole, those which, being most general within the range of our faculties, are oftenest experienced. Another supposition consistent with Realism, is that ideas may be fitted for dealing with things in some relations, but not in other relations—that is, they may be like things in some relations, and less like them, or unlike them, in other relations. As was said of ideas, so it must be said of their relations, that those best realized are probably the ones which most affect us.

Again; it is supposable by the Realist, that ideas may serve for approximate explanation, and yet not serve, or not serve so well, for final explanation. It will be noticed that, as in the earliest steps of explanation we deal with ordinary ideas and ordinary relations, while in ultimate explanation we deal with extraordinary ideas and extraordinary relations, the third supposition leads us to the point to which we have been led by the preceding two. This, observe, is the point at which we arrived in the foregoing paragraph. There is much reason, then, to conclude that representative consciousness is reliable in proportion to the quantity of experience by which it has been developed. Just as we before distinguished between ideas wrought by comparatively few experiences and ideas wrought by comparatively many, we here distinguish between the components of thoughts produced by less and the components produced by more experience. Just as we before complained because Mr. Spencer's induction had not been extended to the most trustworthy ideas, we now charge that it has not been extended to the elements of even the conceptions with which it dealt, presumably the most reliable,—those within the range of every-day experience. In other words, though he experimented with final, he ignored approximate, comprehension of things external.

But the ideas attacked have separate defences, and to these we turn.

§ 15. In the following manner conceptions of the genealogy of the universe are disposed of. (First Prin., § 11.)

"Respecting the origin of the Universe three verbally intelligible suppositions may be made. We may assert that it is self-existent; or that it is self-created; or that it is created by an external agency." Self-existence is inconceivable, because "to form a conception of self-existence is to form a conception of existence without a beginning. Now by no mental effort can we do this. To conceive existence through infinite past time, implies a conception of infinite past time, which is an impossibility." Self-creation is unthinkable, since "really to conceive self-creation, is to conceive potential existence passing into

actual existence by some inherent necessity; which we cannot do. We cannot form any idea of a potential existence of the universe as distinguished from its actual existence," and "we have no state of consciousness answering to the words—an inherent necessity by which potential existence became actual existence." Besides, potential existence "would just as much require accounting for as actual existence; and just the same difficulties would meet us." "Creation by external agency," is unimaginable; for the production of matter out of nothing is not realizable in thought. Moreover, "if space was created, it must have been previously non-existent. The non-existence of space cannot, however, by any mental effort be imagined." "Lastly, even supposing that the genesis of the Universe could really be represented in thought as the result of an external agency, the mystery would be as great as ever; for there would still arise the question—how came there to be an external agency? To account for this, only the same three hypotheses are possible—self-existence, self-creation, and creation by external agency;" and all of these "turn out, when critically examined, to be literally unthinkable."

Has Mr. Spencer forgotten that there is generally "a soul of truth in things erroneous"? And shall he, when he finds his views antagonized, be permitted to dispense with his rule for finding such soul of truth? "This method is to compare all opinions of the same genus; to set aside as more or less discrediting one another those various special and concrete elements in which such opinions disagree; to observe what remains after the discordant constituents have been eliminated." (First Prin., § 2.) This principle must be applied to the three hypotheses before considered. Much as they disagree in other respects, there is one in which there is absolute agreement among them—each postulates the self-existence of something, and thereby asserts its conceivability. Atheism asserts the self-existence of the essentials of the Actual Universe; Pantheism, of a Potential Universe; Theism, of a Creator. Anomalous as it is, "Transfigured Realism" must do likewise. It allows knowledge of the existence of something more than phenomena; the

problem of such existence therefore confronts it. How came "The Unknowable" to exist? On the supposition that we know no more about it than that it exists, there is no possible way of answering: we know nothing contrary to the conclusion that it was created by an agency external to itself, or that it is the product of something potentially what it now is, or that it is self-existent. Strangely, however, we must recognize in it, or back of it, self-existence. Something cannot have sprung from nothing; therefore there must have always been, within or back of "The Unknowable," a persistence of something—some kind of self-existence, if it is only the eternal persistence of the chain of causation. This is an important implication; but Mr. Spencer goes beyond it. He must have decided that "The Unknowable" is self-existent; for he calls it "The Uncaused" and "an unconditioned reality without beginning or end." Without beginning and without cause, is self-existent. Atheist, Pantheist, Theist, and the Promulgator of "Transfigured Realism," rely upon the conception of self-existence: when such bitter antagonists agree, there is strong presumption that their bond is truth.

Thus enforced by the reasonings of Mr. Spencer, his objections must be met and overcome. The immense difference in point of conclusiveness, between the argument which he used against the theory of self-existence, and those which he opposed respectively to each of the other hypotheses, first presents itself for consideration. The hypothesis of self-creation, and that of creation by external agency, were intimated to possess, among other evil qualities, a remarkable proneness to self-contradiction; for he brings them to the point where they must affirm what they began by denying—namely, self-existence. But the postulate of self-existence is not even implicitly charged with suicidal proclivities. If our conception of self-existence is not self-contradictory, what can be said against it? Does it involve absurdities? Mr. Spencer has not preferred this charge against it. It may, in perfect harmony with his remarks about it, be consistent and, so far as it goes, self-supporting; but he thinks it is not sufficiently comprehensive. That it is possible to think of exist-

ence as not derived from anything but previous existence during a finite portion of time, he seems to admit. The alleged impossibility is the conception of self-existence during more than a finite portion of time. Our conception of self-existence, then, is no conception, because we are unable to comprehend its relation to infinite time. Again we must summon our distinguished adversary to do battle with himself. Sensations he has classed among the perceivable and conceivable, yet are they considered by him "absolutely incomprehensible." (First Prin., § 194.) Why incomprehensible? Because their relations to "The Unknowable" are unknown. How knowable? In as far as a knowledge of them does not involve a knowledge of these relations. On Mr. Spencer's principles, therefore, the idea of self-existence may be no more fallacious than the notion of a sensation. Each may be a truthful representation of but a portion of a fact, though neither a representation nor a misrepresentation of the remainder. A similar analogy also avails us. As "The Unknowable" is considered a fact which can be seen but not circumspected, so might self-existence be deemed a fact which is apprehensible though not delineable.

We have been allowing Mr. Spencer benefit of the generally received supposition that a conception of infinity is impossible; it is now time to withdraw the favor. To show, as he could not omit to do, that the conception of infinite past time is an impossibility, he was under obligation to entertain *every* conception thought to represent infinite past time, and render manifest its unmitigated illusiveness. Instead of attempting this, however, he assailed but a single symbol, and one which no one supposed could be formed, and pronounced it impossible. Yet there is a conception of infinite past time which is as far as it can be from being impossible; it is actual. Not only occasionally, when our minds are free from the prejudices of this discussion, but also in every act of thinking of the inability to travel in thought through infinite past time, does it have existence. The bare sound of the phrase, "infinite past time," calls up a corresponding representative mental state. Mr. Spencer has assumed the burden of showing that it is not re-

presentative of a reality. This he cannot do by proving the conception inharmonious with other thoughts of infinite past time, since he does not admit the legitimacy of any such thoughts. Without employing other thoughts of what it purports to represent, he cannot discover the conception in question to be incomplete. He must prove it self-destructive, or otherwise in conflict with undoubted truth; and that he can do neither, a short inspection of the conception spoken of will render probable.

In conceiving infinite past time, I form a conception of something, which conception excludes conception of a beginning of that something; therefore I consider infinite past time to be something of such a nature as is incompatible with a beginning. I do not try to let my thoughts run back through past time to an unlimited extent; for it is unnecessary to do this. The infinity of time is not conceived, as it is not discovered, by traversing time exhaustively; though we cannot conceive time without, to some extent, mentally traversing it. By conception of the *nature*, not the *quantity* of time, is its infinity discovered and represented. To bring into clearer view the distinction here indicated, let it be observed that there are two ways in which we might be supposed to form a conception of past time without limit—extensively and intensively. The former is to let the mental eye run back along the whole extent of past time; scanning part after part, in their order, until all the parts have been exhausted; in vain searching for a beginning. Mr. Spencer and others are right in believing this impossible. The latter is to call into view a portion of time ending with the present and extending indefinitely back; and perceive that it is of such nature that, no matter how much it may be added to by retrospection, its beginning must be in contact with the ending of another part. In this process, the extension of the portion with which we start, considered in regard to its essential qualities, is made the representative of extensions in general; and entitles us to affirm that no extension can be brought to a termination by the beginning of a first portion of time. In the manner described there is formed a conception of time as having at no place a starting point; and this conception is quite

as legitimate as the conception of all possible thoughts of "The Unknowable" as containing no truth; since, even if their number were finite, which it is not, it would be impossible to gather up all such thoughts and examine every one of them.

Infinite past time is, then, conceived as something having no limit but the present, no place of beginning. Some will be curious to know if it really is what we conceive it to be. Let them neutralize their doubts by the assurance that we cannot know, or believe, or even imagine it to be something else. I am well aware that my words will not produce a lasting effect on these self-devouring minds. They will re-read skeptical arguments and return to their unwholesome feast, intoxicated by the superstition that they think infinite past time to be something very different from what their finite faculties compel them to think it to be. "We cannot," they will say, "picture, either serially or simultaneously, *all* past time, and so are unable to take an imaginary trip through it; but if it were conceivable, this would not be the case." That men are prone so to reason, only proves that the mind is confused by two conceptions of the same thing—one conspicuous and imperfect, which is put to the test of legitimacy; and one obscure but reliable, by which the other is tested. The aberration would be avoided, were it as obvious as it is true, that only by employing what I have described as the actual conception of infinite past time, is it possible to discover that we cannot picture all past time, and in fancy journey through it. A picture of some past time is easily formed and readily explored from end to end: how do we know that it is not a perfect picture of all past time? Certainly by comparing it with that conception of infinite past time which is always recognized as being more than a mental picture of a finite portion of time—the picture of the illimitable nature of prior duration. This representation relieves itself of the suspicion of disclosing its own inadequacy, by enabling us to perceive that an infinite cannot be an *all*, because "all" smuggles in the limits which "infinite" excludes; and that, "through the infinite" is a contradiction in terms, because "through" asserts a beginning and an end. There is but one

charge more which is likely to be brought against the conception which I have undertaken to defend—it may be called negative. The obvious answer is that in some respects it is positive, and that its negative qualities are believed to correspond to the negative qualities of what it represents, which is negative in that it is not limited. Is it not strange that thinkers should want the conception of the infinite to exactly resemble the conception of the finite? They can picture all the finite, and consequently seek to picture all the infinite; but the infinite refuses to be comprehended in the limits of an *all*. They may explore all the parts of the finite, from the first to the last, and desire to do the same with the infinite; but there is no last part for them to reach. The finite seems positive, and they complain because they cannot represent the *infinite* as, in the same degree, positive also.

We return to the problem of self-existence, to enquire whether the conception of infinite past time, which Mr. Spencer ignored, will enable us to advance our cause. No difficulty is experienced in thinking of self-existence during a portion of time: as having during that time no creation and no beginning: as having from the beginning to the end of that section of time been derived from nothing but previous existence: as at any particular moment the effect of preceding existence and the cause of existence about to succeed. Have I described a complete conception of self-existence? Mr. Spencer would be among the first to answer, “no;” and his answer could not knowingly be offered, without an antecedent recognition of the unlikeness of the given conception to one yet to be described. The latter represents self-existence as infinite in preceding duration. It is the conception of beginningless time filled in with the symbol of existence. Contemplating something in a portion of time past, and perceiving that its nature excludes a creation there, we involuntarily extend the time only to perceive the same in regard to the addition: thus, through the essentials of the one, we perceive that *no* addition of periods can bring us to a creative point, a place in time where the nature of the entity in question was compatible with the process of creation. The

conception is negative as compared with the one which it is generally thought we should have; but it expresses as much as we know of self-existence, and, very likely, all that there is to know. The other, according to description, would express too much; being a picture of *all* past existence, when there is no such thing. The assertion of infinity is the denial of aggregation. It is the very want of an extreme that characterizes a thing, whether in thought or reality, infinite.

Somewhat inconsistently, Mr. Spencer has asserted (First Prin., § 11), "that even were self-existence conceivable, it would not in any sense be an explanation of the Universe." It would trouble him to inform us how he became possessed of this information. The truth is, he relied upon a conception of self-existence, as his words will show. "No one," he states (First Prin., § 11), "will say that the existence of an object at the present moment is made easier to understand by the discovery that it existed an hour ago, or a day ago, or a year ago; and if its existence now is not made in the least degree more comprehensible by its existence during some previous finite period of time, then no accumulation of such finite periods, even could we extend them to an infinite period, would make it more comprehensible." Not only must we protest against Mr. Spencer's attempt to describe as actual a conception which he has called impossible, but we must also persistently refuse to consider infinite time as an "accumulation of" "finite periods," "an infinite period." Self-existence does not pretend to be an explanation of the universe, but an essential part of that explanation. It does not explain the origin of the existence of all things; it merely explains away the supposed origin of whatever cannot be believed to have come from non-existence into existence. Though it is true the knowledge that an object existed at some particular point, or during some particular portion of time past, will not much assist us in comprehending it; yet it is also true that the genesis of whatever is self-existent is not so much a mystery, when it is thought that the present existence of the self-existent is derived from immediately preceding existence, this again from existence immediately preceding it, and so on without limit.

The Atheist, the Pantheist, and the Theist, may start with the self-existent, and attempt to derive all that is existent from it. The first may begin with Space, Time, Matter, Motion, and whatever else he thinks fundamental, and try to show how from them the present state of the universe was evolved. The second may commence with such a Potential Universe as he thinks most reasonable. He must take care that he does not leave out of his Potential Universe something self-existent, or include something not self-existent; and that the "inherent necessity by which potential existence became actual existence" be not such as will baffle conception. And he must understand, moreover, that potential existence is nothing else than actual existence considered as the potency of what it has subsequently become. The third, to begin, may assume the existence of a Creator. He must conceive the Creator as, more or less, self-existent; and if anything else cannot have been created, he must consider it as self-existent also. The Creator must not be considered the Creator of anything self-existent, but as the moulder of the same, while the author of all or much that is not self-existent. At the start, then, the advocate of Atheism, Pantheism, or Theism, will have nothing to fear from the logic of Mr. Spencer. In fact, they may compel him to join their order; for he must recognize in "The Unknowable Cause" the procedure of the ephemeral from the self-existent. Did he look upon "The Unknowable" as entirely self-existent, he could allow in it no change, no occurring of what did not exist before, no activity by which it affects us, now thus, and now so. Yet if he could bring himself to assert that that "The Unknowable" is entirely changeless, he would still occupy essentially the same position; for, by considering "The Unknowable" as the changeless cause of what we know, he would make it the self-existent cause of effects not self-existent. With the rest, he must assume a fundamental something, and a product thereof, which is not fundamental. Only in regard to details, do they disagree with each other, or he with them.

§ 16 The method by which Mr. Spencer attempts to expand

the idea of causation into a *felo de se* is next in order. This is it. (First Prin., §§ 12, 13.)

"When we inquire what is the meaning of the various effects produced upon our senses—when we ask how there come to be in our consciousness impressions of sounds, of colors, of tastes, and of those various attributes which we ascribe to bodies; we are compelled to regard them as the effects of some cause." This cause may be variously described. "But be the cause we assign what it may, we are obliged to suppose *some* cause. And we are not only obliged to suppose some cause, but also a first cause." If what we assume to be the cause of the sensation be the first cause, "the conclusion is reached. If it is not the first cause, then by implication there must be a cause behind it; which thus becomes the real cause of the effect." "We cannot think at all about the impressions which the external world produces on us, without thinking of them as caused; and we cannot carry out an inquiry concerning their causation, without inevitably committing ourselves to the hypothesis of a First Cause."

Going a step farther, we are driven to the conclusion that the First Cause is infinite. "To think of the First Cause as finite, is to think of it as limited. To think of it as limited, necessarily implies a conception of something beyond its limits: it is absolutely impossible to conceive a thing as bounded without conceiving a region surrounding its boundaries." "If the First Cause is limited, and there consequently lies something outside of it, this something must have no First Cause—must be uncaused. But if we admit that there can be something uncaused . . . we tacitly abandon the hypothesis of causation altogether. Thus it is impossible to consider the First Cause as finite. And if it cannot be finite, it must be infinite."

A third "inference concerning the First Cause is equally unavoidable." It must be absolute; that is, independent. "If it is dependent it cannot be the First Cause; for that must be the First Cause on which it depends." "But to think of the First Cause as totally independent, is to think of it as that which exists in the absence of all other existence; seeing that if the presence of any other existence is necessary,

it must be partially dependent on that other existence, and so cannot be the First Cause. Not only however must the First Cause be a form of being which has no necessary relation to any other form of being, but it can have no necessary relation within itself. There can be nothing in it which determines change, and yet nothing which prevents change. For if it contains something which imposes such necessities or restraints, this something must be a cause higher than the First Cause, which is absurd."

Thus "in our search for a cause, we discover no resting place until we arrive at the hypothesis of a First Cause; and we have no alternative but to regard this First Cause as Infinite and Absolute. These are inferences forced upon us by arguments from which there appears no escape. It is hardly needful however to show those who have followed thus far, how illusive are these reasonings and their results."

Having led us to the conclusion that there is a first cause, and that it is infinite and absolute, Mr. Spencer delivers us into the charge of Mansel; who shows "the fallacy of these conclusions, by disclosing their mutual contradictions."

If, as I suspect, and the words of Mr. Spencer imply, Mr. Mansel has done no more, or little more, than disclose the "*mutual* contradictions" of the three conclusions,—if he has not succeeded in showing, in regard to every one of them, that it annihilates every vestige of itself,—there may be one of these conclusions which is true, or partly true; and the self-contradiction and mutual hostility of the others, joined to their conflict with it, may serve only to furnish it support. However this may be, as I have no interest in defending the First Cause, the Infinite, and the Absolute, as Mr. Spencer describes them, I will not enquire into their conceivability, jointly or separately.

It is enough to know that if Mansel has succeeded in proving them in no manner or degree conceivable, his criticism will be useless for the purposes of Mr. Spencer. A known fact cannot evidence to us a fact which is inconceivable (any farther than it is conceivable). What is inconceivable cannot be an object of thought; no relation which it bears can be an object of thought. If, therefore, the conclusion, that there is an infinite

and absolute first cause be inconceivable, it is not forced upon us; and Mr. Spencer must have somewhere failed in his proof that the thought of sensations as effects leads to inconceivables.

He has not even shown that this thought leads to absurdities. When a train of thought ends in absurdities, the notion with which it began is not therefore known to be logically faulty, unless the operation is known to be logically faultless; and Mr. Spencer has granted that the reasonings which he employed are illusive as well as their results. He began with the notion of sensation as the effect of something external; reasoned, as he admits, illusively; and, because he reached nonsensical conclusions, thought he had proved the original notion illegitimate.

Perhaps it will be thought that he could save himself by substituting a psychological for a logical point of view—by explaining that if the mind is affected with a sensation, or the idea of a sensation, together with an idea of a cause thereof, its state invariably determines an operation ending in the vain endeavor to assume another representative state. Such was indeed the case with Mr. Spencer; but not necessarily so, as logical analysis has already shown. The assumption is otherwise inefficient. It proves too little; for it does not decide whether the original state or the operation following is to blame. It can be so used as to prove too much. Impressions are produced on us, and, as Mr. Spencer says, “we are compelled to think of these in relation to a positive cause.” Now, if the thought of the relation of effect and cause, between sensations and external causes, is proved wholly illusive by the fact that we are compelled to pass from it to absurdities; then are sensations wholly illusive, since we must pass from them to the misleading causal relation. Of no avail is it to reply that sensations are delusive only in so far as they must be thought of as caused; for there is no part of a sensation that may be thought of as uncaused. Equally useless will it be to say that we can think of a sensation without thinking of it as caused—that the thought of a sensation need not be developed until it be made to involve an idea of a cause; for in like manner, can we defend any link in the chain

of causation, by averring that we can ignore those which precede it. The assumption in question is incapable of proof; since if the mind is essentially so constituted that it must frame false thoughts, necessity of thought is not a reliable test of truth. It may be disproved, as what follows will show.

Whenever we have reasoned from what we deem the truth to absurdities, we think that perhaps the process of reasoning, and not that with which it began is responsible; and cannot suppress the suspicion that there may be another process which will be productive of better results. To find this process, we begin again, determined to avoid errors. Fault cannot be found with the assertion, that, "when we inquire what is the meaning of the various effects produced on ourselves," "we are compelled to regard them as the effects of some cause." When again, "we inquire what is the meaning" of this cause, we are obliged to suppose a cause for it; and, again, a cause for this cause; and thus repeat the process, until thought, wearied, turns from the pursuit. Are we obliged to suppose a *first* cause? Experience answers in the negative; for if at any place we say, "the next must be a *first* cause," we are unable to give a reason. Shall we suppose a first cause? Criticism will tell us that we cannot. A first cause would be one that precedes and produces all others; but no cause can fulfill these conditions. It is a matter of fact, that there is, in the sequence of causation, change and something which changes. No one is likely to consider the change as the first cause, since it could not exist before that which sustains change, and could not, for that reason if for no other, have produced the latter. There is, however, a tendency to credit that which changes with being the first cause. Yet this supposition is no better than the other. That which changes cannot have existed before change, which, as it can have sprung from nothing but change, is eternally persistent; nor can it have produced change, for the additional reason that the changeless cannot have spontaneously begun to change. Is it, then, some particular mode of permanence and change combined, which is the first cause? This cannot be: for the eternal persistence of this mode would imply the eternal persistence of

all its effects; and if it has not been eternally persistent, that is a prior cause upon which its last state is consequent. And so on to infinity.

It is observable that we went along smoothly until we tried to postulate a first cause, and that we then became overwhelmed with difficulties. We will, therefore, abandon the hypothesis of a first cause. Being unable to find a beginning to the chain of causation, we know that retrogression cannot bring us to a cause preceding and producing all other causes. This is a conceivable conclusion; and, contrary to the supposition of its falsity, it is least resistible when viewed in the concrete.

Sensations are felt, and causes are looked for. No matter what the sensation, the cause is always found to be substance acting. The activity may be on the part of the body, or extra-organic matter, or both; and in such cases, it is undoubtedly the activity of material substance. Sometimes the mind itself is looked upon as the chief factor; but analysis leads us to believe that the mind is but an activity of something which we call mental substance. Again, when it is said that all things else are to be attributed to the agency of a spiritual substance, the same generalization is exemplified. The cause of sensations may, then, be assumed to be substance in activity, and of course whatever this implies, as relation and change of relation, space and time. To the question—what is the cause of this cause? and of the next? and the next? and so on without end,—we have the answer—Substance in action back in the past without beginning. Analyzing this cause, the questions may arise, whence the substance? and whence its activity? To both these interrogatories, satisfactory answers are at hand. Substance is conceived as self-existent. The conviction is unavoidable that at no point in past time was its existence derived from, or, we may say, caused by anything but its previous existence. Its self-existence is thought of as infinite in past temporal extent. Activity does not hold so strong a title to the attribute of self-existence; for, while it is evident that substance can be thought to exist in the absence of activity, activity cannot be thought to exist in the absence of substance capable of action. Yet in

some respects does activity fulfill the conditions of self-existence: inactive substance cannot be conceived as starting spontaneously into activity. Activity, then, must be believed to have been at no time derived from anything but preceding activity of substance.

We have been led to belief in a cause which may be considered as at any moment the effect of what it was in an immediately preceding state, and the cause of what it will be in an immediately succeeding state. Such doctrine is novel, but necessary to a reconciliation between the abstract and the concrete view of causation; for as in the first we can discover no beginning to the chain, so in the second we must not think we discover something with which the chain began. By looking upon that which constantly persists as ever consequent upon its prior being, we bring our thoughts of causation into even verbal congruity. Yet it may not be always expedient that verbal congruity should be scrupulously maintained. The self-existent may be called the Uncaused, if it is borne in mind that the meaning is that it is uncaused by anything other than its previous self. It may also be called the First Cause, meaning that it existed prior to any passing phase discoverable, no matter how far back we look; but suppressing the thought that it brought about a beginning. Far better, however, would it be to call it the Eternal Cause; for eternity, not beginning, is its distinguishing attribute.

Is this cause infinite or finite? In some respects, one; in some, the other; not infinite in all. Mr. Spencer reasons to the contrary. "To think of the First Cause as finite, is to think of it as limited. To think of it as limited, necessarily implies a conception of something beyond its limits: it is absolutely impossible to conceive a thing as bounded, without conceiving a region surrounding its boundaries." The argument is applicable to the temporal extent of the First Cause, and to little else. The First Cause cannot, for example, be infinitely harmonious: it can be absolutely (completely) harmonious, and no more. To think of harmony as complete, does not imply a conception of greater completeness. But supposing we can imagine some-

thing more, it does not follow that the First Cause should embrace the something more; for much that we can picture we know not to exist. For instance, we limit its homogeneity in thought, as it is limited in reality, when we think that it might have had this quality in a higher degree. Nevertheless we do not think of the lacking degrees, supplied by the imagination, as existing external to the cause and encroaching on its sphere. It should also be remarked, that the existence of the finite marks limitations to the infinite. While, then, the First Cause is infinite in temporal extent, it is in many respects limited. The Infinite which Mr. Spencer submits to Mansel's criticism is, by supposition, infinite in every particular. Ours, being free from its pretensions, will escape its fate.

Is our First Cause absolute, in the sense of being out of relation? It certainly bears relations, and necessarily so. While it does not depend for its being upon any relation to something else, it could not exist without bearing relations within itself. These relations are not something more fundamental than that which sustains them; for they depend upon it as much as it upon them. In fact so far as relation is immutable, and only thus far is it necessary, it is a component of the First Cause. Neither is the principle of necessity which determines what relations shall obtain in the constitution or conduct of the First Cause "a higher cause, or the true First Cause." This principle is not self-dependent. It is but a part of the First Cause which could not exist without the other parts. The components of the First Cause reciprocally sustain each other. Together they form a unit; divided, they are not at all. Our First Cause, being comparatively independent, may be called absolute. It does not pretend to be free from all relation; and so does not call down upon itself the logical chastisement which Mansel inflicts upon its more pretentious rival.

Vehement condemnation of the idea of causation does not prevent Mr. Spencer from employing that very idea when it seems favorable to his cause. Once did we find him reasoning from the postulate that "The Unknowable" is the cause of sensations (*supra*, § 7); and once, from the postulate that it is

the cause of all things (*supra*, § 8). Often, too, throughout his writings, does he speak of it as a cause, and far more often does he imply as much. I submit that if causation is unthinkable, causation by "The Unknowable" is pre-eminently so; and that if we cannot think of "The Unknowable" as causing, we cannot assert that it does cause, much less make this a postulate in our reasoning. Mr. Spencer's example shows that the conception of causation is so persistent that it cannot be repressed.

CHAPTER IV.

THE INDUCTIVE ARGUMENT CONTINUED.

Space, Time, Matter, Motion, Force.

§ 17. Mr. Spencer next directs his critical powers to exposure of the entire fallacy of the various conceptions of Space and Time. Of such conceptions, those which represent Space and Time as realities, being the only ones the writer deems defensible, shall be the only ones defended. What then has Mr. Spencer said against conceiving Space and Time as realities?

This is his first argument. "But while, on the hypothesis of their objectivity, Space and Time must be classed as things, we find, on experiment, that to represent them in thought as things is impossible. To be conceived at all, a thing must be conceived as having attributes. We can distinguish something from nothing, only by the power which the something has to act on our consciousness; the several affections it produces on our consciousness (or else the hypothetical causes of them), we attribute to it, and call its attributes; and the absence of these attributes is the absence of the terms in which the something is conceived, and involves the absence of a conception. What now are the attributes of Space? The only one which it is possible for a moment to think of as belonging to it, is that of extension; and to credit it with this implies a confusion of thought. For extension and Space are convertible terms: by extension, as we ascribe it to surrounding objects, we mean occupancy of Space; and thus to say that Space is extended is to say that Space occupies Space. How we are similarly unable to assign any attribute to Time, scarcely needs pointing out." (First Prin., § 15.)

But is it true that "extension," (meaning the quality), and "Space" are convertible terms? There needs no vocabulary to

tell us that they are not. We never speak of matter as *having* Space; we never speak of matter as *occupying* the quality extension. By extension, as we ascribe it to surrounding objects, we do not mean occupancy of Space; although these two qualities are almost always found together. The idea of extension is, indeed, involved in the idea of the occupancy of Space; but it is not all that is contained therein. Besides being extensive, an object occupying Space is known as being co-extensive—co-extensive with the Space which it occupies. Another element, moreover, is noticeable in occupancy of Space, which is not only lacking to bare extension, but repugnant to it. To occupy, as its etymology discloses, signifies to keep something “so that it cannot be held by others.” This an object occupying Space is believed to do, and is what we have in view when we say that no two portions of matter can occupy the same portion of Space at the same instant of time. Occupancy of Space thus proving to be far more than extension, it becomes evident that we can attribute extension to Space without ascribing to the same occupancy of itself. Consequently extension may be claimed as one of the attributes of Space.

In the case of Time, there is an analogous justification for an analogous claim. This truth cannot be realized without animadverting to a striking dissimilarity between the affections which Space and Time respectively produce on our consciousness; that is, by Mr. Spencer’s admission, a striking dissimilarity of attributes. While Space is occupied by things, Time is occupied by events. Space is extended in all directions; Time in only two. The extension of Space is spoken of literally; that of Time, more or less metaphorically; as is observed when we reflect that a line extended in Space is that by which we commonly symbolize the extent of Time. Differences like these must have forced themselves upon Mr. Spencer when he said (First Prin., § 15) that “to deny that Space and Time are things, and so by implication to call them nothings, involves the absurdity that there are two kinds of nothing.” They are also perceived to differ from other things, no less than from each other. A child shows no more liability than Mr. Spencer

to confound Space and Time with Matter, Motion, or Force. We have been looking upon attributes of Space and Time while contemplating their contrast, both mutual and with other objects. Some of these attributes have names, and some have not; but we must not conclude that therefore the latter are less deserving to be treated as attributes.

While it seemed more thorough to thus point out how many of the contested attributes are to be discovered, there was no imperative necessity to do so, as numbers of these attributes are already much remarked. To Time belong mutability, objectivity and subjectivity; to Space, immobility, objectivity, penetrability. Common to both are the attributes—self-existence, conditionality, limitedness in many respects, relativeness, the quality of being inclusive of other things, likeness and unlikeness of parts, continuity, divisibility, inseparability, and others. That infinity, too, is of their number will, it is hoped, soon appear, notwithstanding the second and last argument which Mr. Spencer has directed against the belief that Space and Time are entities.

“Nor,” he says, “are Time and Space unthinkable as entities only from the absence of attributes; there is another peculiarity, familiar to readers of metaphysics, which equally excludes them from the category. All entities which we actually know as such are limited; and even if we suppose ourselves either to know or to be able to conceive some unlimited entity, we of necessity in so classing it positively separate it from the class of limited entities. But of Space and Time we cannot assert either limitation or the absence of limitation. We find ourselves totally unable to form any mental image of unbounded Space; and yet totally unable to imagine bounds beyond which there is no Space. Similarly at the other extreme: it is impossible to think of a limit to the divisibility of Space; yet equally impossible to think of its infinite divisibility. And, without stating them, it will be seen that we labor under like impotencies in respect to time.” (First Prin., § 15.)

Concerning the doctrine, that a thing to be known must be classed, something critical shall be said when we enter upon a con-

sideration of the deductive arguments. Here it will be sufficient to remark, that if Space and Time were the only infinities they could be classed together; but that, in fact, they may be classed with anything else we know as extended; for the latter is an infinity, inasmuch as it has an infinite number of parts.

Concerning the other difficulty,—the difficulty of picturing infinity,—enough was said before (§ 15), could it be easily remembered and applied. Briefly let us recapitulate. Time was the example before; now the example shall be Space. All Space is inconceivable, because there is nothing answering the description. The assertion of an *all* is the denial of infinity. The infinity of Space is represented by means of the quality not the quantity of the Space we picture, though we cannot have quality without *some* quantity. The same mode of representation is employed when we think of all thought as essentially relative; for we cannot picture all thought in bulk. And now take in mind that these remarks will apply whether we have in view the absence of limit to extent or the absence of limit to divisibility.

§ 18. Immediately after the discussion of Space and Time, the author proceeds (First Prin., § 16) with an attempt to disclose to his readers the self-destructibility of the idea of Matter.

"Matter," he says, "is either infinitely divisible or it is not." We cannot think that it is not, as no part can be thought indivisible. We cannot think that it is; for really to conceive the infinite divisibility of matter, "is mentally to follow out the divisions to infinity."

Here is an infinity which may be classed with the other infinities whose conceivability has been explained. To conceive the infinite divisibility of Matter is but to realize that Matter and indivisibility cannot exist together as substance and attribute; which is done when one division is perceived to be essentially like any other division, in that it must leave parts capable of division. Conception of the infinite divisibility of Matter owes its appearance of impossibility largely to being confounded with the conception of Matter infinitely divided. The two

conceptions are so repugnant in nature as to be exclusive of each other. Matter infinitely divided would admit of no farther division; would thus present a limit to divisibility. Infinite divisibility, on the other hand, precludes infinite division; precludes us from following out the division to infinity,—that is, until all divisions have been traced in thought.

The next charge is that absurdities are involved in the thought of Matter as at any place in contact with Matter.

“Were Matter thus absolutely solid, it would be, what it is not—absolutely incompressible; since compressibility, implying the nearer approach of constituent parts, is not thinkable unless there is unoccupied space between the parts. Nor is this all. It is an established mechanical truth, that if a body, moving at a given velocity, strikes an equal body at rest in such wise that the two move on together, their joint velocity will be but half that of the striking body. Now it is a law of which the negation is inconceivable, that in passing from any one degree of magnitude to any other, all intermediate degrees must be passed through. Or, in the case before us, a body moving at velocity 4, cannot by collision, be reduced to velocity 2, without passing through all velocities between 4 and 2. But were Matter truly solid—were its units absolutely incompressible and in absolute contact—this ‘law of continuity’ as it is called, would be broken in every case of collision. For when, of two such units, one moving at velocity 4 strikes another at rest, the striking unit must have its velocity 4 instantaneously reduced to velocity 2; must pass from velocity 4 to velocity 2 without any lapse of time and without passing through intermediate velocities; must be moving with velocities 4 and 2 at the same instant, which is impossible.

“The supposition that Matter is absolutely solid being untenable, there presents itself the Newtonian supposition, that it consists of solid atoms not in contact but acting on each other by attractive and repulsive forces, varying with the distances. To assume this, however, merely shifts the difficulty: the problem is simply transferred from the aggregated masses of matter to these hypothetical atoms. . . . Exactly the same inquiries may

be made respecting the parts of which each atom consists; while exactly the same difficulties stand in the way of every answer."

Two ways of reconciling the compressibility of a sensible portion of Matter with its contiguity of parts are likely to occur to any one contemplating the problem. One is to suppose that a quantity of Matter escaped in the so-considered act of compression; the other is to assume that within the portion of Matter compressed there were spaces unoccupied. Either theory may be accepted alone, or they may be blended, without adopting Newton's hypothesis that atoms act upon each other through such a medium as unfilled space. Remark, moreover, that when we have to deal with the ultra-microscopic portions of Matter, we shall not be troubled by the phenomenon of compression. But we shall be confronted by the above-quoted appeal to the law of continuity, which, if considering perceptible aggregates of matter, the assumption of empty spaces within would empower us to withstand.

If at any place Matter touches Matter, we can carve out imaginatively, and the proper influences might carve out physically, a portion in which there shall be no point where there is an absence of contact. We may consider this block of any size, but for our purposes it will be convenient to give it the name of atom. Now, supposing, as Mr. Spencer suggests, that one such atom in motion should strike another such atom at rest, what would take place? Were each of these atoms, as visible Matter is supposed to be, composed of many minute particles, not in unbroken contact, though not everywhere apart, we might imagine that, as one atom strikes the other, the components of each at the place of contact are forced back upon their next neighbors, these in turn upon those still more remote, and so on throughout. Thus would we avoid the implication that a body can go from one velocity to another without passing through intermediate velocities. For as the bodies come from no contact into the closest contact they attain, resistance is gradually exerted upon the striking body, and, therefore, its velocity gradually reduced; while motion is grad-

ually imparted to the body struck, and, therefore, its velocity gradually initiated and increased. But the experiment is to be with absolutely solid atoms. How shall it be shown that, under the given circumstances, they will not violate the law of continuity as Mr. Spencer understands it?

Shall it be by explaining that, after the contact begins by the atoms becoming so close that they cannot longer be said to be apart, an interim, during which they draw still nearer, intervenes before they can be said to touch? Unsatisfactory as this explanation certainly is, it may yet be so used as to disconcert Mr. Spencer. If the contact cannot be conceived as continuous, but must be conceived as instantaneous, as in fact it is, we conceive an essential breach of continuity,—something as having widely contrasted states in contiguous points of time. Mr. Spencer dare not admit that change from the state of absolute separation to the state of absolute union is thinkable as an entirely gradual change, because he would thereby deny the necessity of imagining an immediate imparting of motion. On the other hand, if he would maintain that gradual touching is inconceivable, he is bound to establish such proposition; and this can be done only by pointing out that we cannot avoid conceiving the change from no contact to some contact as instantaneous.

After it has been granted that change from separation to slightest contact cannot be conceived except as being suddenly ended by the production of some contact, we are prepared to bring forward stronger instances of like implication—instances which manifest most clearly that it is not “inconceivable that in passing from any one degree of magnitude to any other, all intermediate degrees must be passed through.” Between no contact of cubes and contact extending throughout their adjacent sides, many quantities of contact might intervene; as if they should be brought precisely face to face by touching the corner of the one to the corner of the other and gradually bringing them more and more together, by sliding the first upon the second. Mr. Spencer would not hesitate to allow that by clashing them together we could produce the greatest quan-

tity of contact at a point in time, and without producing a plurality of degrees. And again: consider that the objects are of different sizes; that the smaller is a unit, and the larger an aggregate of matter; and that when they come together they will form a larger aggregate. Evidently, if they can be conceived to unite, as the portions of time in which their different relations severally endure unite, the aggregate may be conceived as passing from one magnitude to another many degrees greater without ever having any of the magnitudes that potentially lie between.

In all the instances given, we have seen our ability to conceive what Mr. Spencer said we could not conceive. Is it so in the case in question? Introspection discloses that it is. Nothing is more definitely representable than motion as instantly lost and instantly acquired. No one ever doubted the fact except those who, like Mr. Spencer, looking at it in the abstract, thought it implied an exception to a rule which they deemed invariable. By comparison with the concrete, the abstraction has been corrected. The difficulty of conceiving an instantaneous transition from one state to another, so unlike that we symbolically picture them as in the distance, has been shown not to be universal. While this is so, there has been no denial that the difficulty is very general. No such denial was necessary. Mr. Spencer has been completely answered, if it now appears that velocity can be thought to be acquired and lost, as a man may acquire a dollar or lose his hat—all at once.

Supposing himself successful in exposing the self-contradiction of other conceptions of Matter, Mr. Spencer takes in hand that of Boscovich; which is, "that the constituents of Matter are centres of force—points without dimensions, which attract and repel each other in suchwise as to be kept at specific distances apart." Over this absurdity, Mr. Spencer gains a speedy victory; but one not as extensive as he seems to think it. "A disciple of Boscovich," he argues, "may reply that his master's theory is involved in that of Newton; and cannot indeed be escaped. 'What,' he may ask, 'is it that holds together the parts of these ultimate atoms?' 'A cohesive force,' his

opponent must answer. 'And what,' he may continue, 'is it that holds together the parts of any fragments into which, by sufficient force, an ultimate atom might be broken?' Again the answer must be—a cohesive force. 'And what,' he may still ask, 'if the ultimate atom were, as we can imagine it to be, reduced to parts as small in proportion to it, as it is in proportion to a tangible mass of matter—what must give each part the ability to sustain itself, and to occupy space?' Still there is no answer but—a cohesive force. Carry the process in thought as far as we may, . . . and we can find no limit until we arrive at the conception of centres of force without any extension." (First Prin., § 16.)

To the acceptance of centres of force without any extension, there is, for those who follow Newton, an alternative; namely, to accept an infinite series. If a cohesive force sustains an atom, there is no reason for not saying that it sustains half an atom, quarter of an atom, any part of an atom, though we divide forever.

§ 19. After Matter, Motion is put upon the rack. ('First Prin., § 17.)

"Here, for instance," says the author, "is a ship which, for simplicity's sake, we will suppose to be anchored at the equator with her head to the West. When the captain walks from stem to stern, in what direction does he move? East is the obvious answer—an answer which for the moment may pass without criticism. But now the anchor is heaved, and the vessel sails to the West with a velocity equal to that at which the captain walks. In what direction does he now move when he goes from stem to stern? You cannot say East, for the vessel is carrying him as fast towards the West as he walks to the East; and you cannot say West for the converse reason. In respect to surrounding space he is stationary; though to all on board the ship he seems to be moving. But now are we quite sure of this conclusion?—Is he really stationary?" The author answers this question by showing us that we have not allowed for the earth's rotary and orbital motions, or for the

motion of the whole solar system, or for the possible motion of our whole sidereal system; and that when we do this we must confess that "that which seems moving proves to be stationary; that which seems stationary proves to be moving; while that which we conclude to be going rapidly in one direction, turns out to be going much more rapidly in the opposite direction."

We have, in the above example, a very good specimen of false inference from partial premises. The captain is first perceived to move with respect to the ship, and secondly perceived not to move with respect to the water. To the untaught child he would be thought motionless in respect to space. How do we know that he is not motionless? Not by finding that there is something in the perception which vitiates it; not by being led by the perception into conceptions which prove self-destructive; but by considering that the earth is moving variously, and that the captain is moving with it. The error of the child, then, arises from a mere mistake of fact. Explain the mistake, and the child will follow you in thought until you reach a combination of facts too complicated for its faculties. At some point it would, of course, stop bewildered; and so would Mr. Spencer, if he should attempt to follow out, in all their complications, the phenomena of evolution. Now, if nothing has been shown to prevent our conceiving Motion, except its complications and our ignorance of what they are, it does not yet appear that we may not form of Motion, as we do of other facts, a conception always corresponding with what might be, and always coming more and more into correspondence with what is. It is probably owing to a sense of the inefficiency of the argument before us that it was supplemented by the following.

"We take for granted that there are fixed points in space with respect to which all motions are absolute; and we find it impossible to rid ourselves of this idea. Nevertheless, absolute motion cannot even be imagined, much less known. Motion as taking place apart from those limitations of space which we habitually associate with it is totally unthinkable. For motion is change of place; but in unlimited space, change of place is inconceivable, because place itself is inconceivable. Place can

be conceived only by reference to other places; and in the absence of objects dispersed through space, a place could be conceived only in relation to the limits of space; whence it follows that in unlimited space, place cannot be conceived—all places must be equidistant from boundaries that do not exist."

Try the experiment of imagining a body moving from point to point in space. You do not meet the least suggestion of a difficulty. This is, as far as it goes, good evidence, and raises a favorable presumption. Moreover you have not contemplated Motion as a change of relation with respect to the limits of space, but with respect to points. Were it not so, however, you would not be involved in perplexities; for the limitations which we habitually associate with extensive Motion are themselves real. They are nothing but the outskirts of that district of space which for the moment chiefly engages the mind. The district is an actuality, and so are its confines. The latter, it is true, appear to recede, when the mind, with a fresh impulse, seeks to pierce with its vision a region still more remote; but close observation shows that the limits to the first region fade out of contemplation as those of the second become distinct. They are not thought of as going out of existence, or as changing place. You know, then, of some realities which, in the absence of matter, would enable you to conceive place. Had these escaped you, you would still have been able to find others which would do as well; for instance, the spacial point of view we occupy. Nothing illusive has so far appeared in the habitual conception of Motion. But Mr. Spencer would say that the conception is not of absolute Motion, because nothing "fixed" can be pointed out. Think, if you can, of anything appertaining to void space that is not fixed. Think of a point moving, of a line shifting its direction, of a spherical portion of space flying through an infinite vacuum, and revolving as it goes. Here is an object, and here the place it occupies. Think of the object leaving its place. Now think of the place leaving the object. You at once perceive a difference. The place is immovable. The relations which it bears to other places are necessary and eternal. We do not seem to be

deprived of the means of location. Everything within the universe may be located by reference to any point, line, figure, place, or object holding place. We may start with any one of these; knowing that in relation to it every object has absolute situation, and all motion is absolute.

"Another insuperable difficulty," our author continues, "presents itself when we contemplate the transfer of Motion. . . . In what respect does a body after impact differ from itself before impact? What is this added to it which does not sensibly affect any of its properties and yet enables it to traverse space? Here is an object at rest and here is the same object moving. In one state it has no tendency to change its place; but in the other it is obliged at each instant to assume a new position. What is it which will forever go on producing this effect without being exhausted? and how does it dwell in the object? The motion, you say, has been communicated. But how?—What has been communicated? The striking body has not transferred a *thing* to the body struck; and it is equally out of the question to say that it has transferred an *attribute*. What then has it transferred?"

I will suggest what seems to me to be the explanation of the phenomenon. A boy wields a bat, and striking a ball sends it flying through the air. What has taken place? The activity called willing has set free and given direction to certain nervous energies, which in turn have produced a co-ordination of muscular movements. By these movements, the bat was impelled and the ball struck. It being impossible for the ball to share with the bat any portion of the space it occupied, it was under the necessity of stopping the bat or being pushed along by it. Both effects were in a measure produced. But lo! in a moment more the ball left the bat and flew onward. While we perceived an urging we did not marvel; but when this ceased to be perceived the mystery began. The solution, like the problem itself, is not given in perception. It is the answer to the query—what took place that was not perceived? As usual, no account has yet been taken of the atmospheric or ethereal mediums. May not the initial moving of the ball have given

direction to and increased their activities, thus inducing a continuance of the propulsion which the bat began? May not the ball, also, have been given an internal activity, which, by acting upon surrounding mediums, promotes motion? There is no other conceivable hypothesis; which is the best reason that could be had for accepting either one or both of these. In respect to details we are liable to err, but concerning the abstract proposition there can be no mistake. Motion, in the absence of propulsion is unthinkable. Propulsion must consist in the action of the object on something in contact with it, or in the action of the latter upon the object, or in both; and this is the essence of our conclusion. In its most abstract form it is as readily realized as was that concerning the mental, nervous, and muscular antecedents of the ball's motion. Whatever is said to render it more definite, must be understood to be advanced as a provisional elaboration.

According to a law which seems to be exemplified by all orders of phenomena, anything affected by motion—as an object made to move and a medium around about it—would tend to acquire the combination of state and activity most consistent with the affecting motion; and this would be a combination eventually promotive of such motion. This proposition, like the other, is not to be prejudiced by what follows it. With this caution, we shall leave the more for the less abstract, the general for the particular.

Little as is known of the action of air and the ethereal substance under an influence which, in the important particular, transcends observation, and novel as is the thought of them as continuers of motion, no violence is done to the current understanding of their nature by imagining them as in the act of urging forward an object enveloped in them. The object cannot be made to move without causing much that is before it to move in the same direction, and much also to be dissipated laterally. Thus, by opening a path, is resistance lessened. The lessening of resistance obviously affects the ease with which the motion of the object may be continued after the initiatory impulse. Now consider what must simultaneously take place in

the rear. A space must be vacated by the object, and as quickly filled by an in-rushing from all directions except that of the object. To the confluence of forces so formed there is no outlet except in the direction of the object; consequently this direction they take, impelling the object forward. Thus far the explanation postulates no other external activity than that derived from propulsion of the object itself; for the filling in behind might be attributed to the forcing out from the path before—to alternative compression here and expansion there. Important agencies there are, however, which, existing independent of the object's motion, powerfully aid in its prolongation. One of these is gravity. Supposing a vacuum to be formed, gravity would cause it to be filled to overflowing. The momentum acquired by an in-rushing medium would be expended in the direction in which resistance is already overcome. Other activities besides those of gravity would be similarly diverted in the same direction. Minute perturbations of the atmosphere or of the less stable substance which is supposed to pervade it—and there must be many of them besides heat and light—would, taking the line of least resistance, ultimately make their contribution too. It needs but a statement to carry conviction that such a concatenation of activities as that described must, when once established, repeat itself until by resistance overcome.

Internal activities we cannot so exhaustively conceive. In the case of a ball, we may imagine a compression, caused by resistance on one side and propulsion on the other, alternated by an expansion which inclines from the propulsive toward the less powerful resistant force. The action of compression and expansion may be realized by pressing an elastic ball down upon the floor and then gradually taking the hand away. This shows how expansion in the line of least resistance may change the relation of an object to space. In the case of an arrow we may superadd the notion of a shiver or of a lateral expansion running from end to end, or of such undulations as an eel makes in moving through the water. In the case of a clot of mud, on the contrary, we cannot go far towards imagining any internal activities whatever. Examples,

however, we have which enable us to conceive very definitely how an object may aid in propelling itself.

Is not the explanation arrived at more in harmony with observation than that which is universally accepted? No answer can be based on the supposition that an object once started in an infinity of unoccupied space would journey on alone forever. Such a fact has never been, and can never be, observed; and Mr. Spencer's argument rests on its inconceivability. It is pleasing to have such good authority for the proposition that we are unable to realize that there can be something dwelling in an object, which, in the absence of anything else, impels it onward; since if there is no such entity or property our conclusion is necessitated. Mr. Spencer's last resort appears to be the paradox, that, although nothing can be imagined as continuing motion *in vacuo*, nothing can be imagined as bringing it to an end. The problem at once disappears when it is observed, that motion of matter, not in contact with other matter, cannot be thought of as beginning; and that therefore questions in regard to its termination are idle. Should we suppose an object to be pushed into a region of space absolutely void, we could not suppose it to break contact with that which pushes it, upon the stoppage of the latter. If it be asked what there is to hinder it from going on, the answer is,—nothing but the want of something to make it move. It could not acquire an inherent tendency to move under such conditions, and would therefore be stopped by the withdrawal of external influence, independent of any inherent tendency to come to rest.

With renewed confidence, we may proceed with the comparison of fact and theory from which we have digressed. It is an observed law of Motion that, other conditions being the same, the greater the extent of surface which an object in motion presents in the direction of resistance, the sooner it will be brought to rest. One might think that, as the same amount of surface must be presented in the direction of the propulsive force, an exact compensation would be made. This would be approximately true in respect to the less stable medium, but far from true in respect to the more stable medium. The

larger the surfaces in question, and the faster the rate of speed, the more resistance the atmosphere would oppose in front, and, after reaching a certain maximum, the less assistance it would afford behind. Where the speed is great, its action may be compared to that of water stoutly resisting and slowly filling in behind a moving oar. Of the ethereal fluid the same is doubtless true, only in a different degree; that is, its maximum of propulsion is greater.

That a heavy object is, other things being equal, more difficult to stop than a light one, is a rule which, though possibly not without exception, must not be ignored. The prevalent notion of inertia will not explain it. No one can answer why, on the old hypothesis, there should be found a stronger tendency to continue motion in a heavy object than in a light one. To think that that which has the most power to refrain from motion must have the most power to resist stoppage, is but to formulate the reverse of an explanation; for that which at first chiefly hinders the object's motion—gravity—continues all along to act. Inertia is an internal passive proclivity. Why should a moving object have a greater internal passive proclivity to fly onwards whenever there exists a greater external tendency to bring it to rest? Why should the surplus of tendency to move, over resistance to motion, be small where the resistance is small, and great where the resistance is great? What is this secret, inactive, yet acting, perversity? Is an internal, passive proclivity to act, is inertia even thinkable? Any conceivable explanation would be preferable to the old one. It may be to offer but a vague solution, but it is certainly to offer what is, to some extent, a solution, to say that a body's susceptibility to aerial and ethereal impulses must depend, in a great degree, upon its internal structure—for instance, upon its density. And it will as surely carry this solution further to remark that a body's ability to promote its own motion must depend largely upon the same condition—for example, upon vibratory peculiarities. In the last remark we have an explanation of what the inherent tendency, which we find it almost impossible to banish from our thoughts, really is.

The next question is,—Why is a moving object more difficult to stop in proportion as its speed is great? We totally fail to comprehend how a stronger inactive tendency to change place can be stored up inside an object by starting it rapidly, than by starting it slowly; but we are far from being unable to realize how, by starting motion with a more rapid impulse, a greater quantity of both external and internal activity is induced to act in a given time.

On the theory of Motion here advanced, some would expect to feel a rush of air and ether following every moving object. They must be reminded that the older theory involves the same filling-in, and with about the same force and rapidity. Concerning its imperceptibility, the same explanation must be given, whichever theory we adopt. In the first place, the phenomenon is frequently noticeable; and in the second place, it is more often too slow or too inextensive to be perceived.

Experience and theory seem in perfect harmony; and if so, our conclusion is unassailable.

One more puzzle connected with motion confronts us. We cannot, Mr. Spencer assures us, represent the transition from rest to motion, and from motion to rest.

“Truly to represent these transitions in thought, we find impossible. For a breach of the law of continuity seems necessarily involved; and yet no breach of it is conceivable. A body traveling at a given velocity cannot be brought to a state of rest, or no velocity, without passing through all intermediate velocities. At first sight, nothing seems easier than to imagine it doing this. It is quite possible to think of its Motion as diminishing insensibly until it becomes infinitesimal; and many will think equally possible to pass in thought from infinitesimal motion to no motion. But this is an error. Mentally follow out the decreasing velocity as long as you please, and there still remains *some* velocity. Halve and again halve the rate of movement forever, yet movement still exists. . . .”

Whoever admits, as Mr Spencer has, the possibility of conceiving a loss of the first half of the velocity, can allege no obstacle to conceiving a loss of the second. If in the one case

the alternative is between passing in thought over an infinite series and thinking of the sudden loss of a quantity of motion, so is it in the other.

Waiving this tacit admission, there are grounds for believing either alternative conceivable. Some pages back it was shown that to the rule, that in passing from one degree of magnitude to another all intermediate degrees must be passed through, there are exceptions, and that the transition between velocities is of their number. That an infinite number of degrees *potentially* lie between some velocity and no velocity, and between any two velocities, must be granted by all who believe infinite divisibility thinkable; but that each must be actually passed through whenever there is a transition between states of which it is a conceivable mean, is as untrue as that three apples cannot at once be taken from a lot of five.

The other alternative is likewise conceivable. The infinity, of which unlike velocities are the extremes, is not an infinity in respect of extent but in respect of divisibility. Now it is the extent which the mind is supposed to glance over, and not the possible divisions thereof. An infinitude of parts is indeed traversed, but without contemplation as such. In thought itself, however, there is a corresponding infinitude. Change from one mental state to another, if it be gradual, is infinitely divisible. So we find subjective infinity representative of objective infinity; and this is what Mr. Spencer thought could not be.

§ 20. The conception of Force was the next to be assailed. (First Prin., § 18.)

"On lifting a chair, the force exerted we regard as equal to that antagonistic force called the weight of the chair; and we cannot think of these as equal without thinking of them as like in kind; since equality is conceivable only between things that are connatural." "Yet, contrariwise, it is incredible that the force as existing in the chair really resembles the force as present to our minds." "So that it is absurd to think of Force as in itself like our sensation of it, and yet necessary so to think of it if we realize it in consciousness at all."

To avoid the imputation of accepting a very questionable proposition, it must be said that it is not the force known in consciousness that is thought to be equal to the force by which the chair is drawn downwards. The effort of volition necessary to the lifting of the chair, probably acts by directing into certain channels forces that are not present in consciousness. But after this correction has been made, the fact remains that we are compelled to attribute to volitional and extra-volitional force a certain likeness of nature. On this fact, however, the refutation may be made to rest. A resemblance of causes is inferred because there is observed a likeness of their effects. Such inference is legitimate. What matters it that one agency is an ingredient of consciousness and the other not? Their difference in some respects is not repugnant to their similarity in others. Mr. Spencer's unexpressed major premise is, that things which are equal in any particular are like in all. He would shrink from relying on this premise; and if he does not rely on it, his conclusion fails.

But Mr. Spencer does not permit the preceding argument to go forth alone. The next is, that when we contemplate either attraction between objects separated or the transmission of light and heat from the Sun to the Earth, "we are obliged to conclude that matter . . . acts upon matter through absolutely vacant space; and yet this conclusion is positively unthinkable." Of course it was impossible to justify such a position without disposing of the hypothesis of an intervening fluid. This is what he says of it. "Remembering that this ether is imponderable, we are obliged to conclude that the ratio between the interspaces of these atoms" (those of ether) "and the atoms themselves, is incommensurably greater than the like ratio in ponderable matter; else the densities could not be incommensurable. Instead then of a direct action by the Sun upon the Earth without anything intervening, we have to conceive the Sun's action propagated through a medium whose molecules are probably as small relatively to their interspaces as are the Sun and the Earth compared with the space between them: we have to conceive these infinitesimal molecules acting on each other through

absolutely vacant spaces which are immense in comparison with their own dimensions."

Strange the thought that ethereal units are made to convey force by projecting them upon each other through the spaces intervening should have escaped one who was bound to show its inconceivability. What has been here neglected, let an admission supply. The real key to the problem is the fact that there is no necessity of concluding that the ethereal fluid is less dense than the hardest metal. If it is only sufficiently less coherent than other fluids, it will consist with all that we actually know about it. That it is imponderable proves nothing. A substance which permeates all other substances is necessarily incapable of being weighed. But that it has no weight is a very different proposition, and one not admitting of the ordinary proof nor easy to believe.

How delusive is our supposed knowledge of the nature of the force of gravitation, Mr. Spencer, in the next paragraph, proceeds to show.

"That the gravitation of one particle of matter towards another, and towards all others, should be absolutely the same whether the intervening space is filled with matter or not, is incomprehensible. I lift from the ground, and continue to hold, a pound weight. Now, into the vacancy between it and the ground, is introduced a mass of matter of any kind whatever, in any state whatever—hot or cold, liquid or solid, transparent or opaque, light or dense; and the gravitation of the weight is entirely unaffected. The whole Earth, as well as each individual of the infinity of particles composing the Earth, acts on the pound in absolutely the same way, whatever intervenes, or if nothing intervenes. Through eight thousand miles of the Earth's substance, each molecule at the antipodes affects each molecule of the weight I hold, in utter indifference to the fullness or emptiness of the space between them. So that each portion of matter, in its dealings with remote portions, treats all intervening portions as though they did not exist; and yet, at the same time it recognizes their existence with scrupulous exactness in its direct dealings with them."

If we dismiss, as manifestly gratuitous, the assertion that objects attract each other where nothing intervenes, our first defence may be a demurrer—a provisional admission of the facts alleged, coupled with a denial that they make out a case of essential incomprehensibility. The truth to be ascertained is, not what we know, but what we are capable of knowing. It is lawful for us to admit that gravitation is, as yet, nothing to us but a fact, and to nevertheless believe that its cause will some time be known. The only way in which the facts asserted could be effectively used to deprive us of this belief is by showing every possible conception of the nature of gravity to be inconsistent with them. This has not been attempted. In the popular understanding of attraction,—in the thought of the exercise of force upon distant things *independent of anything intervening*,—absurd as it is, there is nothing to imply that it should make any difference whether there be or be not a substance intervening, or whether an intervening substance be “hot or cold, liquid or solid, transparent or opaque, light or dense.” Indeed consistency demands the contrary inference. The theory that a fluid which permeates everything else is the medium of attraction has also little to fear from Mr. Spencer’s criticism. Such fluid could not be intercepted in its work of communication by grosser forms of matter. This theory may be elaborated into greater strength. If the ultimate form of all matter is the very fluid in question, then no difference what is inserted between two objects the space between them is filled, and solely filled, by the medium of attraction. I have in mind another theory which is similarly capable of defence; namely, that the intervening object, attracting and attracted by both objects which it intercepts, forms a link in the chain of attraction equivalent to the one or ones supplanted by it. Many theories being consistent with them, we may conclude that, granting Mr. Spencer’s facts, his case proves *prima facie* incomplete.

Were it not so, we could still show that he is estopped from asserting the facts on which he relies. For this purpose, the following is quoted. “Throughout the investigations leading

the chemist to the conclusion that of the carbon which has disappeared during combustion, no portion has been lost, what is his repeatedly assigned proof? That afforded by the scales. In what terms is the verdict of the scales given? In grains—in units of weight—in units of gravitative force. And what is the total content of the verdict? That as many units of gravitative force as the carbon exhibited at first it exhibits still. The validity of the inference, then, depends entirely upon the constancy of the units of force. . . . Everything turns on the truth of the assumption that the gravitation of the weights is persistent, and *of this no proof is assigned, or can be assigned.*" (First Prin., § 61.) Without accepting this to its full extent, it is competent to say that the difficulties which are here held to preclude the demonstration that the weight of a body of matter is unchanged by combustion, will, as far as they are real, similarly prevent us from satisfying ourselves that the body's weight is unaffected by interposing heat, for instance, between it and the earth. In the latter case, moreover, there is the additional feature that the change of condition is likely to modify the scales and the weights. But dropping these considerations, there may, nay, there must be differences of weight, infinitely important, which the finest scales, though unaffected by change of surroundings and used in combination with unchanging weights, cannot indicate.

The allegations in question are refutable. It is not known that attraction between separated objects is the same "whatever intervenes, or if nothing intervenes." The latter condition is never, to our knowledge, fulfilled: something always intervenes. With this in view, we must conclude that what intervenes is a matter of great moment. Where much extent of matter intervenes between objects, their attraction is small. It is therefore untrue "that each portion of matter in its dealings with remote portions, treats all intervening portions as though they did not exist." Exactly the reverse is true: portions of matter which are near are dealt with to the partial exclusion of portions which are remote.

And again: were Mr. Spencer right in saying that attraction is not affected by what intervenes

between attracting objects, he would be compelled to deny that such attraction may be added to by substituting for the intervening matter, matter of greater density. Air at first intervening between the pound weight and the earth, their attraction towards each other should be increased by inserting between them a mass of solid metal.

Undoubtedly Mr. Spencer would assent to both these corrections. He no doubt holds that the gravity of a pound weight is increased by inserting between it and the earth matter of greater *density*; and would explain that the difference is too slight to be detected. On the other hand, it is equally probable he would concede that the gravity of the weight would be lessened by bringing between it and the earth matter of greater *extent*. To thus correct himself, however, would be to allow that attraction *is* affected by the character of that through which the line of attraction runs.*

* Until the preceding had been electrotyped, I thought to reserve entire for future elaboration, but will here in part disclose, a theory of gravitation to which I have been led, or rather helped, by my theory of motion above expounded. I regard that tendency to move which we call gravity, as well as the motion resulting from it and all other perceptible motion, as due (principally) to ethereal IMPULSES. The fact that substances are susceptible to the force of gravitation just in proportion as they are susceptible to a tendency to move imparted to them by other agencies, is what led me to suspect that one explanation might serve to account for the two phenomena. In the case of gravity, the theory is that the motion or tendency to move is due to pre-existing and continuous perturbations of the inter-stellar medium, urging what it envelops and permeates towards centres of attraction, or repulsion, or, more properly, propulsion. That the lines of attraction converge, elucidates the increase of gravity towards the centres. Such lines may be straight or spiral. Bodies doubtless take an active part in their own gravitation, as they do in other motion; which is one part of the explanation of why gravitation is increased by gravitating. Constituted subject to the influence of gravity, perhaps constituted mainly by it, all bodies must be of nature consistent with, and susceptible to its tendencies. Probably those most susceptible to it pass its influence most readily on: if so Mr. Spencer's attack and my defence stand much as they stood before; for then the chain of attraction must be strongest where its links are most weighty and compact.

CHAPTER V.

THE INDUCTIVE ARGUMENT CONTINUED.

Self-knowledge: Extent of Consciousness and Mental Substance.

§ 21. Before proceeding, a short explanation must be interpolated. Hitherto the contest has been over ideas of what we call the "External World." That upon which we are about to enter, will concern ideas of the Substance of Mind and the Intrinsic Nature of its modes. In other words, Mr. Spencer maintains that we can have no legitimate ideas of Mental Substance or even of the Noumenal Nature of states of consciousness; and it is a defence of ideas purporting to be such that is next to engage us. Mr. Spencer's object, it is hardly necessary to remind the reader, is to show States of Mind to be partly, and Substance of Mind wholly, unknowable—components of "The Unknowable."

His method, it must be observed, is not as thorough as was that employed to prove the External World unknowable; for, whereas he aimed to dispose of every possible idea of it, he has not sought to experiment with more than a partial conception of the Real Nature of conscious states, or with more than a partial conception of the underlying Substance. Almost all thoughts of the Intrinsic Nature of the Mental World are left in oblivion, and therefore in integrity. The reader will observe how few are noticed.

§ 22. What has Mr. Spencer to say (First Prin., § 19) about the unthinkableness of the Intrinsic Nature of mental affections? Notwithstanding that the inconceivability of an infinite series prevents us from thinking of the chain of consciousness as infinite, he argues, we are as conclusively prevented from thinking it finite. "Go back in memory as far as we may, we are wholly

unable to identify our first states of consciousness: the perspective of our thoughts vanishes in a dim obscurity where we can make out nothing. Similarly at the other extreme. We have no immediate knowledge of a termination to the series at a future time; and we cannot really lay hold of that temporary termination of the series reached at the present moment. For the state of consciousness recognized by us as our last, is not truly our last. That any mental affection may be contemplated as one of the series, it must be remembered—*represented* in thought, not *presented*. The truly last state of consciousness is that which is passing in the very act of contemplating a state just passed—that in which we are thinking of the one before us as the last. So that the proximate end of the chain eludes us as well as the remote end.”

As Mr. Spencer has not attempted to show that a first state of consciousness is unthinkable, and as we have seen that infinite continuance is thinkable, we might, in the face of his argument, take the position that consciousness had a beginning but will have no end. To those who choose to do this, it will not matter whether a last state is or is not conceivable. Or we might assert that a last state will occur without being contemplated, just as he maintains that a state, temporarily the last, occurs without being contemplated. But this supposition, that a state of consciousness occurs before it is perceived—that it cannot be contemplated until it is represented—is the central fallacy in the author’s reasoning. There exists in the mind a conception of a series of feelings, while there arises a feeling to take its place as one of the series. Can it be denied that relations between present feeling and feelings present by representation may establish themselves simultaneously with its establishment? As it cannot, we are convinced of our ability to lay hold of the temporary termination of the series as completely as we should expect to lay hold of a point in continuous change. Having this power, we can as easily conceive a future termination as we can a past beginning. There remains no assigned reason why we cannot conceive a future termination, after dispelling the delusion that a mental affection and its

recognition cannot co-exist; for this delusion is all that gives the following extension of the argument the air of plausibility.

“‘But,’ it may be said, ‘though we cannot directly *know* consciousness to be finite in duration, because neither of its limits can be actually reached; yet we can very well *conceive* it to be so.’ No: not even this is true. In the first place, we cannot *conceive* the terminations of that consciousness which alone we really know—our own—any more than we can *perceive* its terminations. For in truth the two acts are here one. In either case such terminations must be, as above said, not presented in thought, but represented; and they must be represented as in the act of occurring. Now to represent the termination of consciousness as occurring in ourselves, is to think of ourselves as contemplating the cessation of the last state of consciousness; and this implies a supposed continuance of consciousness after its last state, which is absurd. In the second place, if we regard the matter objectively—if we study the phenomena as occurring in others, or in the abstract, we are equally foiled. Consciousness implies perpetual change and the perpetual establishment of relations between its successive phases. To be known at all, any mental affection must be known as such or such—as like these foregoing ones or unlike those: if it is not thought of in connection with others—not distinguished or identified by comparison with others, it is not recognized—is not a state of consciousness at all. A last state of consciousness, then, like any other, can exist only through a perception of its relations to previous states. But such perception of its relations must constitute a state later than the last, which is a contradiction.”

They who hold that a state of consciousness cannot be perceived while it exists, must face this difficulty. It is theirs exclusively. They may, if they prefer, avoid it by embracing the belief that consciousness is unending, or that a last state may occur unperceived. But they are recommended to the doctrine that the perception of a state of consciousness is not subsequent to, but contemporaneous with, the state perceived. It is not easy to discover how any can object to this view,

seeing that to have consciousness and to know that we have it form not distinct acts, but one indivisible act.

The supposed difficulty is put in still another form. "If ceaseless change of state is the condition on which alone consciousness exists, then when the supposed last state has been reached by the completion of the preceding change, change has ceased; therefore consciousness has ceased; therefore the supposed last state is not a state of consciousness at all; therefore there can be no last state of consciousness."

Either of two replies may be made, accordingly as the person replying holds one or the other of two alternative positions. If he thinks that consciousness follows after change in Mental Substance, he can say consistently that consciousness may exist after such change has ceased. If, on the other hand, he thinks that consciousness consists in, and is simultaneous with, change of substance, he need only suggest that when the last change is completed, the last state is completed and at an end. Neither opinion obliges the holder to think of consciousness as persisting after the termination of its conditions.

§ 23. Confident of having demonstrated that any notion of the extent of consciousness is essentially incongruous, Mr. Spencer next ostensibly takes in hand the notion of Mental Substance. "Nor do we meet," he says, "with any greater success when, instead of the extent of consciousness, we consider its substance." According to his usual practice, he devotes a paragraph to showing that, "belief in the reality of self, is, indeed, a belief which no hypothesis enables us to escape," and then concludes with the following argument.

"But now, unavoidable as is this belief—established though it is not only by the assent of mankind at large, endorsed by divers philosophers, but by the suicide of the sceptical argument—it is yet a belief admitting of no justification by reason: nay, indeed, it is a belief which reason, when pressed for a distinct answer, rejects. . . . The fundamental condition to all consciousness, emphatically insisted upon by Mr. Mansel in common with Sir William Hamilton and others, is the antithesis of

subject and object. And on this 'primitive dualism of consciousness,' 'from which the explanations of philosophy must take their start,' Mr. Mansel founds his refutation of the German absolutists. But now, what is the corollary from this doctrine, as bearing on the consciousness of self? The mental act in which self is known implies, like every other mental act, a perceiving subject and a perceived object. If, then, the object perceived is self, what is the subject that perceives? or if it is the true self which thinks, what other self can it be that is thought of? Clearly a true cognition of self implies a state in which the knowing and the known are one—in which subject and object are identified; and this Mr. Mansel rightly holds to be the annihilation of both."

A mistaken application of the foregoing argument has resulted from the confounding of self with the Substance of Mind. This substance is truly a part of self; but it is not all of self; nor is it that part in regard to which the difficulty arises. It is inferred from the fact of consciousness. Only that part of self which is immediately known in what is called "self-consciousness" is involved in the perplexity. The question is, how can this present at once the contrast between the subject and object of cognition? Obviously it is not sufficient to say that in self-consciousness we contemplate two sides of the same fact; for, in this case, the subject and object present absolutely the same appearance. The mind, looking upon itself, sees but one thing—the mind thus looking upon itself. One other proposition is available; namely, that what is known in self-consciousness is the same thing under two sets of relations; and this is the theory which analysis justifies. In the first place, self is classed with other objects of thought. It is perceived to differ with them in other respects, but to resemble them in being an object. In the second place, self as knowing self is classed with, although at the same time, distinguished from, self as knowing other objects. By the process postulated, the same aggregate of consciousness is made to present at once the contrast between the subject and the object of thought.

CHAPTER VI.

THE INDUCTIVE ARGUMENT CONCLUDED.

Transfigured Realism Confronted by the Problems of Realism.

§ 24. The preceding three chapters were confined to a confutation of certain reasons given by Mr. Spencer for "having repudiated as impossible the Philosophy which professes to formulate Being as distinguished from Appearance." (First Prin., § 35.) In the present one it is to be shown that these reasons, if adequate for the purpose to which they were directed, are similarly adequate to prove impossible a Philosophy which professes to formulate Appearances. Upon a theory of the function of Philosophy, which none can gainsay, and which Mr. Spencer asserts, I ground the charge. "Besides," he says (First Prin., § 41), "seeing that the unified knowledge constituting a completed Philosophy, is a knowledge composed of parts that are universally congruous; and besides seeing that it is the business of Philosophy to establish their universal congruity; we also see that every act of the process by which this universal congruity is to be established, down even to the components of every inference and every observation, consists in the establishment of congruity." Could there be a complete congruity among *phenomena* while Mr. Spencer's puzzles remain unsolved? To this question we shall now address ourselves.

§ 25. When we are self-conscious, we are conscious of nothing not phenomenal. If we are conscious of more, if we are conscious of the Substance of Mind, then must Philosophy take this "component of observation" in hand and find it a place in the universal congruity. But Mr. Spencer is not one who will assert that Mental Substance is immediately known in self-consciousness. In his "Principles of Psychology" (§ 59)

he does not
mean | he employs several arguments to confirm the contrary. How, then, could he excuse the philosophy, which is to establish congruity among phenomena, from showing the congruity among the phenomena composing self-consciousness? Not, certainly, by distinguishing between the apparent and intrinsic natures of mental affections, and saying that the latter are the authors of the difficulty: if they are, they are given in consciousness, and therefore necessitate a philosophy of more than appearances; or they are not given in consciousness, and from this we know that there is no incongruity in self-consciousness. Accepting this latter conclusion, would be equivalent to admitting the entire congruity of a state of consciousness, in which subject and object are completely identified. By refusing to make this admission, he would assert an incompatibility of appearances. Escape would be possible if the doctrine that there can be no identification of subject and object were peculiar to Ontology. That Ontology, as we have seen, is in a position to reject such a doctrine, is scarcely less to be doubted than that the prevailing Phenomenal Philosophy accepts it. Mr. Spencer would no more affirm that the same phenomena can be at once the subject and object of cognition, than he would deny that in the act of self-consciousness they seem to be the same. He must therefore acknowledge the paradox to be, until explained away, an obstacle to the establishment of phenomenal congruity.

The stumbling-block, which he has placed in the path of those who search for an understanding of Mental Substance, constantly rises in his own path as an impassable barrier.

Having seen that a mental state aware of itself is a mystery similar to a mental substance aware of itself, we are prepared to appreciate the remark, that there is an element in consciousness which Mr. Spencer will consent to call metaphorically the Substance of Mind. Meaning this, he will allow (Prin. of Psy., § 58) that "we do know something about the substance of Mind, and may eventually know more." This element is the primordial element of consciousness—the unit of feeling, whose various combinations constitute those states of mind

which to introspection seem indecomposable. He is desirous of showing that the ultimate unit of phenomena is a feeling akin to a nervous shock. "It is possible, then—," he says (Prin. Psy., § 60), "may we not even say probable—that something of the same order as that which we call a nervous shock is the ultimate unit of consciousness; and that all the unlikenesses among our feelings result from unlike modes of integration of this ultimate unit." Undoubtedly; but if so, we have a mental substance which is more closely involved than any other is supposed to be with the perplexities of self-consciousness. Mr. Spencer is as much under necessity of explaining self-consciousness as they who assert that we can be conscious of the noumenal Substance of Mind. He is far more under such necessity than one who deals with this Mental Substance as lying wholly out of consciousness.

9 feelings...
of sense...
general...

In a very different instance, we shall find Mr. Spencer confronted by the problem of self-consciousness. The hypothesis that like units of feeling, differently combined, form a phenomenal substratum of states of consciousness, is supported (Prin. of Psy., § 60) by pointing out "the complete congruity between this view and the known character of nerve action." He explains that "if each wave of molecular motion brought by a nerve fibre to a nerve-centre, has for its correlative a shock or pulse of feeling; then we can comprehend how distinguishable differences of feeling may arise from differences in the rates of recurrence of the waves, and we can frame a general idea of the way in which, by the arrival through other fibres, of waves recurring at other rates, compound waves of molecular motion may be formed, and give rise to units of compound feelings: which process of compounding of waves and production of correspondingly-compounded feelings, we may imagine to be carried on without limit, and to produce any amount of heterogeneity of feelings." Of course Mr. Spencer is careful to explain that he has not been guilty of here striving to comprehend the noumenal something which underlies mind—that nerve-substance and nerve-action are nothing but phenomena. For present purposes, the caution is immaterial,

save as it tends to modify our language. It merely tells of two *substrata* under consciousness, instead of one. In the above example, as in multitudes that might have been chosen, Mr. Spencer is found endeavoring to explain the phenomena of mind through the phenomena of matter. What is noteworthy is that he attempts this, leaving self-cognition unexplained. His objective elucidation of consciousness can never, he is compelled to admit, explain self-consciousness. He is therefore in a position analogous to that of one who, being unable to offer an explanation of self-consciousness, yet holds the belief in a substance of mind which does much to render consciousness in general comprehensible. The incompleteness of the one explanation is equivalent to the incompleteness of the other.

Let us turn, from what may be thought more or less adventurous, back to essentials of Mr. Spencer's philosophy. Phenomena distinguished as external are no less real than phenomena distinguished as internal. Moreover, the phenomenon of the externality of the former is no more readily suppressed than the phenomenon of the internality of the latter. Mr. Spencer speaks (Prin. of Psy., § 62) of the "distinction of Subject and Object" as "the consciousness of a difference transcending all other differences." Now, if Philosophy can neither banish from its realm external manifestations, nor resolve them into internal manifestations, by banishing so much of them as characterizes them external, she must entertain the question—Can internal manifestations be resolved into external manifestations? Having shown our warrant for propounding this question, we are entitled to an answer. Whether it be "yes" or "no," we need not accept it unless it be justified. In either case, the justification must be that a comparison of internal and external phenomena was made, and that the answer given is authorized by the result. In either case, however, we can interpose the objection, that, as there can be no comparison between something inscrutable and something else, the conclusion that self-consciousness is, or the conclusion that it is not, identical with objective manifestations, can never be justified. Thus is Mr. Spencer's philosophy brought face to face with a question

which it cannot answer. The charge is, the reader must observe, not that there is a question to which his philosophy has not found an answer, but that any answer which can be found is, in its mouth, illegitimate. It will clarify our ideas somewhat to learn how Mr. Spencer actually deals with the question raised.

"Let it be granted," he says (*Prin. of Psy.*, § 62), "that all existence distinguished as objective, may be resolved into the existence of units of one kind. Let it be granted that every species of objective activity, may be understood as due to the rhythmical motions of such ultimate units, and that among the objective activities so understood, are the waves of molecular motion propagated through nerves and nerve-centres. And let it further be granted that all existence distinguished as subjective, is resolvable into units of consciousness similar in nature to those which we know as nervous shocks; each of which is the correlative of a rhythmical motion of a material unit or group of such units. Can we then think of the subjective and objective activities as the same? Can the oscillation of a molecule be represented in consciousness side by side with a nervous shock, and the two be recognized as one? No effort enables us to assimilate them. That a unit of feeling has nothing in common with a unit of motion, becomes more than ever manifest when we bring the two into juxtaposition." Mr. Spencer can hardly consider this a solution of the question. "When we recall the fact that molecules are never at rest, and that by carrying their individual rhythmical motions into the compound molecules formed of them, they produce compound rhythms—when we recollect the extreme complexity of the molecules of nervous matter, and imagine how various and involved must be the rhythms of which they are the seats—when, further, we infer the countless modifications of rhythms that must under such conditions become possible" (*Prin. of Psy.*, § 61); we shall doubt whether Mr. Spencer really made a serious endeavor to compare a unit of feeling with each distinct phase of neural modes. When also we reflect that he is ever pointing out similarities between nervous and mental phenomena; when we add to this that we have recently found him

giving a material explanation of mental heterogeneity, and think of his theory that all explanation is assimilation; we shall be inclined to doubt his complete acceptance of his own conclusion. If he had seriously attempted to make the comparison, he would have discovered an obstacle of his own creation. The feeling, called a nervous shock, involves self-consciousness. Concerning their relations to each other, two suppositions may be made, either of which will answer our purpose. If we argue that, as to have a feeling and to know that we have it constitute but one feeling, the self-consciousness in which a unit of feeling is known, is that feeling or a considerable part of it, we assert a mental mode which cannot, if self-consciousness is beyond our grasp, be compared with material phenomena. If, on the contrary, we assert a distinction between a unit of feeling and the self-consciousness which accompanies it, we nevertheless allow a kind of consciousness similarly incapable of comparison. In fine: in whatever way we strive to reduce consciousness, subjectively considered, into its elements, there must always remain at least one element, of which Mr. Spencer can affirm neither materiality nor immateriality.

After the answer that the phenomena of consciousness are not contained in the phenomena of matter, surprise must be called forth by the declaration that Mr. Spencer deals with mental phenomena as entirely included in those that are physical. Yet the declaration must be made. Evolution, as Mr. Spencer sets it forth, purports to include every knowable activity. What is Evolution? Here is his definition. "Evolution is an integration of *matter*, and concomitant dissipation of *motion*; during which the *matter* passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained *motion* undergoes a parallel transformation." (First Prin., § 145.) This process includes all phenomenal activity; includes the activity, consciousness; includes the evolving of consciousness; includes the production and maintenance of every element in consciousness. Again is Mr. Spencer met by self-consciousness. Is this produced by, and does it consist in, the above-described activity of matter?

is a question to which he, not being cognizant of self-consciousness, can give no answer.

The collateral importance of some of the foregoing criticisms must not cause us to lose sight of the main issue. An impeachment, which had been brought against the Noumenal Philosophy, we have found it possible to reiterate in many ways against the Phenomenal Philosophy. Confining ourselves to internal phenomena, we observed that self-consciousness nevertheless demanded explanation. From the same point of view, we saw Mr. Spencer occupying a position as objectionable, as far as self-consciousness is concerned, as that of those who assert consciousness of Mental Substance. Assuming next an objective stand-point, we learned that Mr. Spencer's attempts to explain mental affections through material manifestations were as much restricted by the difficulties of self-consciousness as is the attempt to accomplish the explanation by means of Mental Substance. Next it was shown that the question of identity or non-identity of subjective with certain objective phenomena was a question for the Phenomenal Philosophy; and that there are but two answers, neither of which, on Mr. Spencer's principles, it can advance. Lastly we find that Mr. Spencer has given both answers, but that he had no right to give either; the problem of self-consciousness not being, in his opinion, soluble.

§ 26. The Extent of Consciousness will not require as much discussion as was given to Mental Substance. "Difficult as we find it distinctly to separate and individualize them, it is nevertheless beyond question that our states of consciousness occur in succession." (First Prin., § 19.) Feeling justified by the deliverance of consciousness in making this statement, Mr. Spencer is obligated, if any one is, to ascertain whether the succession of consciousness is of finite or infinite extent. Here is the fact that the phenomena of consciousness occur in succession. Here is the belief, itself a phenomenon, that in the succession there must have been a state or no state which all others follow, and necessarily will be a state or no state which all others precede. And here are the imagined absurdities to

which any of these suppositions leads. How is Mr. Spencer to establish congruity? He is both powerless and unwilling to dispute the fact of succession. The belief in extremes or no extremes he has not ability to suppress. It may be called speculative, but still it will remain as a phenomenon which will persist in repugnance until reconciliation. Moreover it is a speculative difficulty which arises on the contemplation of phenomena solely, and has no necessary reference to their intrinsic nature. There remains no course but to establish congruity between the fact and the belief. In doing this, Mr. Spencer will be met by the precise difficulties which he presented to us, and will be compelled to adopt precisely the same means of overcoming them. If he cannot believe the series infinite, he must believe it finite. He can have no experience of a beginning or a termination. Of a temporary termination he cannot be conscious, as such, unless relations between states and the states themselves can exist together. When he tries to conceive a future ending of his own consciousness, he is confronted by the same difficulty: he must conceive an affection and perception of it as simultaneous, or the perception as intercepted and prevented from occurring. Upon consciousness presented objectively and in the abstract he cannot refuse to look. When we think of consciousness as depending for all its modes upon something out of consciousness, (though it be "The Unknowable"), we view it objectively. When we think of consciousness as characterized by changes, and class these changes with other changes, we view it objectively. When we think of consciousness as always manifesting changes, without regard to any particular change, we view it in the abstract. Since these views are necessitated, Mr. Spencer cannot but entertain them; and when he does, he will find for himself the problems which he found for us, and be obliged to resort to our solutions.

As unworthy of notice, Mr. Spencer treats the incongruities of extended consciousness when they tend to circumscribe his speculations. He has virtually decided, and from an objective and abstract point of view, that the extent of consciousness is finite. Somewhere in the process of evolution, he must recog-

nize for it a beginning, and in the state of stable equilibrium, which he predicts, he must recognize for it an end.

§ 27. By considering Force as a mere shadow thrown from beyond upon the screen of consciousness, Mr. Spencer expects to eliminate the problems which it otherwise presents. We shall see that the expectation is not to be realized.

On lifting a chair, two phenomena present themselves: one objective, the other subjective; one an effort of volition, the other a downward pulling of the chair. Contemplating the two phenomena as such, we wonder whether, if realized more fully (as phenomena may be), they would or would not present similarity. As they exhibit some equivalence, we should incline to think they would, had not Mr. Spencer told us that so to think is impossible. Here, again, unless a former explanation be applicable, we have a phenomenal incongruity—an inclination to think phenomena like, opposed by inability to conceive the same.

When it comes his turn to explain this equivalence, he duly adopts our explanation. According to him, mental forces are nothing but transformed physical forces, capable of being re-transformed. I quote his words. "Various classes of facts thus unite to prove that the law of metamorphosis, which holds among the physical forces, holds equally between them and the mental forces. Those modes of the Unknowable which we call motion, heat, light, chemical affinity, &c., are alike transformable into each other, and into those modes of the Unknowable which we distinguish as sensation, emotion, thought: these, in their turns, being directly or indirectly re-transformable into the original shapes. That no idea or feeling arises, save as a result of some physical force expended in producing it, is fast becoming a common place of science; and whoever duly weighs the evidence will see, that nothing but an overwhelming bias, in favor of a preconceived theory, can explain its non-acceptance. How this metamorphosis takes place—how a force existing as motion, heat, or light, can become a mode of consciousness—how it is possible for aerial vibrations to generate the sensation we call sound, or for the

forces liberated by chemical changes in the brain to give rise to emotion—these are mysteries which it is impossible to fathom. But they are not profounder mysteries than the transformations of the physical forces into each other.” (First Prin., § 71.) Judging from this, Mr. Spencer must be understood to assert a conceivable likeness between mental and material forces; and this whether the force we know is like anything in the noumenal world or not.

Presence of the Sun, and sensations of heat and light, are co-existent phenomena. The latter two seem consequent upon the first; yet we cannot trace out the connection of dependence. Perhaps, we think, if the phenomena were on a very much larger scale, or if our perception of them were more minute, we could do this. But the fact is, the phenomena are not contiguous, and there can be no connection in the absence of contiguity. We must, therefore, submit to the perplexity, or set about supplying, by means of the imagination, the intervening phenomena. We must surrender to incongruity, or think that if the shadows upon the screen could only be intensified (as with other phenomena often is the case), something now unperceived would be perceptible, and would connect the phenomena in perception as they are now connected in thought. The phenomena to be supplied, can be nothing but what we call the activities of a medium; and it is as necessary to make them contiguous as it was to complete the contiguity of the original phenomena.

Which does Mr. Spencer prefer: incongruity of thought, or the conception which brings about congruity? This implies his answer: “the elevation of water to the height whence it fell, is due to solar heat, as is also the genesis of those aerial currents which drift it about when evaporated, and agitate its surface when condensed. That is to say the *molecular motion of the ethereal medium* is transformed into the motion of gases,” &c. (First Prin., § 139.) Shortly after this he speaks of “molecular movements propagated by the Sun to the Earth.” The hypothesis of an ethereal medium, notwithstanding the phenomenon of imponderability, seems both conceivable and acceptable to him.

In the fact of gravitation there is a latent problem for even those who think with Mr. Spencer. Call the fact an appearance, if you please, and consider it as taking place entirely within the mind. You cannot by this means eradicate the thought of another appearance which, were our faculties (as they are ever becoming) more acute, would be found connected with this one, and would render it comprehensible. The possibility of another appearance is as persistent as the actuality of the one we know. We should conceive the possible appearance to be some so-called activity of the ethereal medium, but then we would be met by other actual appearances, which Mr. Spencer has pronounced conflicting with it. What should we do? Mr. Spencer shall decide.

He explains (First Prin., § 57) that gravity "is probably a resultant of actions pervading the ethereal medium." This is the conclusion we once found it necessary to defend against his charges. He justifies us by professing it.

§ 28. Motion as a phenomenon, is no more readily brought into philosophical congruity than Motion as a noumenon.

Owing to vast and unknown complications, "that which seems moving proves to be stationary; that which seems stationary proves to be moving; while that which we conclude to be going rapidly in one direction, turns out to be going much more rapidly in the opposite direction." All this appears upon comparison of phenomena. To realize the confusion, and to resolve it into consistency, it is necessary to imagine absolute direction; that is, direction through positions that are fixed. If, as Mr. Spencer claims, to do this is impossible, the phenomena of Motion must ever remain a mass of incongruities.

"Motions, visible and invisible, of masses and of molecules," says he (First Prin., § 55), "form the larger half of the phenomena to be interpreted. . . ." It is, therefore, of great moment to know whether Motion, as a phenomenon, can be congruously conceived. What the conception involves, Mr. Spencer explains. "A something that moves; a *series of positions* occupied in succession; and a *group of co-existent*

positions united in thought with the successive ones—these are the constituents of the idea.” (First Prin., § 49.) It is not to be pretended that Mr. Spencer conceives, or thinks he conceives, positions as not fixedly related to other positions; whence it follows that he conceives motion as absolute. To see that he invariably does this, nothing more is necessary than a reference to his chapter on “The Direction of Motion,” (First Prin., Part II., Chap. IX.), where he will be found conceiving direction as fixed and as congruous with other manifestations.

To the ball which I hold in my hand I can very readily impart motion. What continues the motion of the ball? we ask; meaning what new phenomena would be presented, if the phenomenon before us were (as phenomena often are) expanded? The question is one which we cannot suppress. It is impossible to conceive that under the conditions described no new phenomena would appear; and Mr. Spencer thinks, equally impossible to conceive such phenomena. It is for him to reconcile the conflict.

The reconciliation could be brought about only by an explanation essentially like the one called for and given when the supposition was that we contemplated noumena. Phenomena involved in that phenomenon, the ball, or phenomena external and contiguous with it, or both, must be imagined. Mr. Spencer advances no explanation; but does what is less allowable. He accepts (First Prin., § 49) “the necessity which the moving body is under to go on changing its position” as the “fundamental element” of the idea of motion, regardless of the perplexities to which the acceptance leads. This is only another instance in which he does what he insists we have no right to do.

“We daily witness the gradual retardation and final stoppage of things projected from the hand or otherwise impelled. . . .” (First Prin., § 17.) Can we construe the phenomenon in thought without conceiving a breach of continuity? We will argue that the phenomenon of motion cannot change into the phenomenon of rest without taking the forms of each of the numerous phenomena that potentially intervene, and that to follow out the transmutation is impossible, because there must always remain some intermediate phenomenon which might be

presented. What escape is there for Mr. Spencer? Is he not committed, if ever we were, to a choice between a breach of graduality and an infinite series?

What his explanation would be is problematical, since he has given none. Perhaps, as his philosophy is the one threatened, he would explain that, in the case presented, continuity does not mean graduality; and that the second choice is not to *follow out* infinite divisibility, but to *pass over* something capable of unending division. Whatever the answer, it would be no denial of the late assertion that "we daily witness the gradual retardation and final stoppage" of moving things. The perception occurring daily, the conception must be possible. One, no less than the other, is a subjective thing infinitely divisible. It would be far better for Mr. Spencer to accept some explanation suggested than to proceed, as he has been doing, in utter disregard of a supposed phenomenal incongruity.

§ 29. The conclusion that what we contemplate when perceiving Matter is nothing but an aggregate of manifestations, will not dispel the mysteries of its infinite divisibility and ultimate constitution.

Not only any phenomenon called a portion of matter, but any phenomenon whatever, objective or subjective, having extent, is either infinitely divisible or not infinitely divisible. The manifestation Matter can be conceived as dividing into two such manifestations; either partial manifestation may be conceived to similarly divide; and so on. When parts too small to be distinguished have been reached, we can imagine them magnified into perceptibility (as phenomena sometimes are), and proceed with the division. The query is, can we, or rather could we if eternity were given us, reach parts which, having no extent, cannot be divided? We cannot think so, and Mr. Spencer insists that we cannot think the contrary; yet one or the other we must think, if we think congruously.

Which maintains in Mr. Spencer's thoughts? I quote from him. "We are obliged to conceive every portion of matter as containing more than one resistant position — that is, as occupy-

ing Space. Hence the necessity we are under of representing to ourselves the ultimate elements of Matter as being at once extended and resistant: this being the universal form of our experiences of Matter, becomes the form which our conception of it cannot transcend, *however minute the fragments which imaginary subdivisions produce.*" (First Prin., § 48.) The preference here indicated is for an infinite series of conceptions, rather than a terminal conception of an indivisible part. The thought of such infinite series contains all that was considered objectionable in the thought of infinite divisibility.

If Mr. Spencer imagined that he either could or would refrain from all inquiry into the ultimate constitution of Matter, he was guilty of considerable inadvertence. We cannot but think that accompanying that mode of "The Unknowable" which produces in us the appearance Matter, there are other modes which, were our faculties more susceptible, would prove in the manifestation Matter the quality of unbroken or broken continuity. If we conclude that unbroken continuity would appear, we cannot imagine how the manifestation can be made to contract its limits. To the same conclusion another fact is repugnant. It is an established mechanical truth that when a material aggregate of manifestations, to which is joined the manifestation motion, is brought into a certain dynamical relation with an equal material aggregate of manifestations, to which a manifestation of motion is not joined, the two aggregates divide the manifestation of motion equally between them. This division cannot be gradual unless the parts of the aggregates (supposing the whole phenomenon to be, as phenomena may be, expanded) are capable of closer approximation; and if the division is not gradual, it contravenes the law of continuity, as Mr. Spencer understands it. Confining ourselves now to a part, we see that we have the same reason for believing that, imagining it magnified, its parts cannot be in unbroken contact; and so we may proceed unendingly. Is this result satisfactory to Mr. Spencer? Will he consent to reject the atomic hypothesis, because solid atoms will not observe the law of continuity?

What he says on the subject (First Prin., § 48) is very

satisfactory. "We may therefore deliver ourselves over without hesitation, to those terms of thought which experience has organized in us. We need not in our physical, chemical, or other researches, refrain from dealing with Matter as *made up of extended and resistant atoms*; for this conception, necessarily resulting from our experiences of Matter, is not less legitimate than the conception of aggregate masses as extended and resistant. The atomic hypothesis, as well as the kindred hypothesis of an all-pervading ether, consisting of molecules, is simply a necessary development of those universal forms which the actions of the Unknowable have wrought in us. The conclusions, logically worked out by the aid of these hypotheses, are sure to be in harmony with all others which these same forms involve, and will have a relative truth that is equally complete." Considering Mr. Spencer's strenuous, and it may be said successful, endeavor to convince us that one of "the conclusions logically worked out" from the atomic hypothesis is that, in the transfer of motion, matter violates his notion of continuity, a pleasurable surprise is awakened by the assertion that such conclusions "are sure to be in harmony with all others which these same forms involve."

Banish noumena from the sphere of legitimate inquiry, and the problem of the coherence and incompressibility of Matter will remain. In contemplation there is a phenomenon which will not be, like some others, metamorphosed into a less extensive phenomenon, or into two or more. The conviction is strong within us that, could the noumenal mode which produces this phenomenon affect us more deeply,—or more properly, were the phenomenon (as phenomena may be) magnified,—we should be able to distinguish what makes it impossible to compress or rend. That which we think would be disclosed is some force manifestation; and we imagine that this would be found to pervade any part of the material phenomenon, any part's part, and so on eternally; unless we could eventually reach parts which are centres of force without extension. Shall we say that parts of matter *ad infinitum* are extended, and thus accept an infinite series; or shall we say that the ultimate

components of matter are extensionless centres of force?

This is the author's solution of the problem. "Centres of force attracting and repelling each other in all directions, are simply insensible portions of matter having the endowments common to sensible portions of matter—endowments of which we cannot, by any mental effort, divest them." (First Prin., § 74.) So it appears that no matter how far the division of the manifestation Matter be pursued, we can never arrive at parts which are the phenomena known as extensionless centres of force—that insensible portions of the manifestation Matter have the endowments common to its sensible portions, though divided for ever and ever. This is essentially like a conviction which Mr. Spencer once sought to prove absurd. We have escaped no difficulty by considering Matter a phenomenon, nor have we found any explanation other than the ones we had before.

§ 30. Between Space manifestations and Time manifestations, a distinction must be drawn. All of the former are thought to be objective; while many of the latter are considered subjective. Time being given in subjective manifestations, does not depend for its recognition on objective manifestations. Neither, therefore, does the question concerning the character of its attributes, the quantity of its extent, and its infinite divisibility. These questions will obviously arise, even if we exclude from the mind thought of anything beyond its limits.

What, for instance, are the attributes of Space manifestations? What, in other words, are their peculiar manners of affecting that which contemplates them? Shall the answer be, that Space manifestations present the attribute extension? Such answer will not be sufficient; for to give an object but one attribute is to identify it with that attribute. We must say what there is in Space besides extension, or we must say what are the attributes of extension. Finding their attributes difficult to name, must we conclude that Space and Time manifestations have no peculiar ways of appearing in consciousness—are not distinguishable from each other and from other manifestations? What does Mr. Spencer do?

His writings abound with proof that he does not do this. "The abstract of all sequences is Time. The abstract of all co-existences is Space." (First Prin., § 47.) The chapter in which this occurs sets forth the antithesis between the manifestations called Space and Time; and between these respectively and those called Matter, Motion, and Force. Yet the Realist was denied the means of an antithesis.

Supposing self to travel out into Space is but imagining a certain sequence of experiences. Might such sequence, as far as it depends upon Space experiences, be prolonged forever? We cannot believe that the sequence could be terminated by the want of a Space experience. There is, then, no limit to the manifestation, Space. Conceive this and you conceive the infinite. "Similarly at the other extreme." Dividing a portion of Space is but dividing an appearance, and dividing an appearance is but causing or imagining one appearance to take (as they readily will) the form of several. The division always leaves more appearances than it found, and so long as there is an appearance left, it may continue or be imagined to continue. Conceive this, and you again conceive infinity. Now if infiniteness of extent and divisibility are unthinkable, we are inevitably committed to the unthinkable by contemplation of the appearance Space and, let us add, the appearance Time; from which the inference is that these appearances are delusive.

Mr. Spencer does not treat either as delusive. Throughout his endeavor to establish universal congruity, he makes frequent use of them, never hesitating, because to expand them is to induce perplexities. The problem of their infinite divisibility, I believe, he entirely ignores; the question of their infinity of extent he has dared to pronounce upon. In a recent article in the *Popular Science Monthly* (Oct., 1882) he declares that "The Unknowable" is "without limit in space, and without beginning or end in time." This means that Space and Time manifestations of "The Unknowable" are potentially without limit. But the potentially limitless is no more readily conceived than that which is actually limitless. If the one conception is possible, so is the other.

§ 31. At this point we are brought back to the difficulties dealt with in the third chapter. It is to be shown that they, like the rest, are not born to Realism only.

It is not possible for Mr. Spencer to suppose that when a sensation has been attributed to the agency of "The Unknowable," all inquiry concerning its antecedents is at an end. Feeling a tap on his shoulder, he would look around to ascertain, as he must explain, what knowable antecedent occasioned the sensation felt. Seeing a friend, he would cease to wonder; or, if surprised to find his friend so near, a disclosure of remoter antecedents would afford solution. All this without a single thought of "The Unknowable:" illustrating that even if a sensation has unknowable antecedents, it nevertheless has a chain of antecedents that are knowable. Is this chain infinite or finite? Apprehending that some real or imaginary knowable antecedent of *any* effect upon the mind must precede such effect, we should prefer to call the chain infinite. Mr. Spencer repudiates an infinite series; consequently he must accept the alternative, which is a First Cause, that is, a first knowable antecedent of an effect upon any mind. His own arguments should be sufficient to convince him that his phenomenal First Cause is Infinite in backward extent, and Absolute in the sense of being independent of other phenomena.

In his favor it must be said that he does not seek to avoid the question. "Be it in a single object or the whole universe, any account which begins with it in a concrete form, or leaves off with it in a concrete form, is incomplete; since there remains an era of its knowable existence undescribed and unexplained. Admitting, or rather asserting, that knowledge is limited to the phenomenal, we have, by implication, asserted that the sphere of knowledge is co-extensive with the phenomenal—co-extensive with all modes of the Unknowable that can affect consciousness. . . . These preceding and succeeding existences under sensible forms, are possible subjects of knowledge and knowledge has obviously not reached its limits until it has united the past, present, and future histories into a whole." (First Prin., § 93.) Thus are the past, present, and future

histories united into a whole: "if, as we have seen reason to think, there is an alternation of Evolution and Dissolution in the totality of things—if, as we are obliged to infer from the Persistence of Force, the arrival at either limit of this vast rhythm brings about the conditions under which a counter-movement commences—if we are hence compelled to entertain the conception of Evolutions that have filled an immeasurable past, and Evolutions that will fill an immeasurable future; we *can no longer contemplate the visible creation as having a definite beginning or end, or being isolated.* It becomes unified with *all existence before and after*; and the Force which the Universe presents, falls into the same category with its Space and Time, as admitting of no limitation in thought." (First Prin., § 190.) Here is another passage to the same effect. "Apparently, the universally-co-existent forces of attraction and repulsion, which, as we have seen, necessitate rhythm in all minor changes throughout the Universe, also necessitate rhythm in the totality of its changes—produce now an immeasurable period during which the attractive forces predominating, cause universal concentration, and then an immeasurable period during which the repulsive forces predominating, cause universal diffusion—alternate eras of Evolution and Dissolution. And thus there is suggested the conception of a past, during which there have been successive Evolutions analogous to that which is now going on; and a future during which successive other such Evolutions *may* go on—ever the same in principle, but never the same in concrete result." (First Prin., § 183.) Ever the same fundamentally but otherwise ever in change—this was our history of the past and prophecy for the future.

§ 32. The last of our analogies is one of peculiar interest and supreme importance. It has been supposed by both the adherents and opponents of Mr. Spencer, that by considering that through which all things exist as unknowable, it is possible to preclude the old question of self-existence or creation. We have seen that this question arises with regard to "The Unknowable;" we have yet to see that, in regard to appearances, it will not subside.

In addition to sequence of the knowable from "The Unknowable," and of "The Unknowable" from "The Unknowable," *ad finem* or *ad infinitum*, there is a sequence of the knowable from the knowable, with or without limit. This stupendous mass of partly constant, partly variable manifestations, known as the universe, must have had a beginning or no beginning. Absence of a beginning implies infinity, and infinity cannot be detailed in thought. Moreover want of a beginning is not a complete history of any manifestation; particularly such as have had a beginning. Turn now to the hypothesis of creation. The phenomenon of a beginning implies a phenomenon from which the beginning is a consequent. Try to think, for example, of the phenomenon of nebular diffusion as the first phenomenon, and learn how signally you will fail. There arises in consciousness a vague conception of a manifestation back of this one, and essential to its occurrence. To think congruously that any phenomenon is the first belonging to the universe, we must think of it as due to some prior phenomenon not belonging to the universe. Such prior phenomenon may be deemed as either external to the universe or as not actual. First suppose it to have been primarily potentially actual, and to have contained some element which caused it to develop actuality. In making such a supposition, we trifle with words. Potential actuality, if it be thinkable, is nothing but actuality. The element which is said to cause the transmutation from non-existence into existence is as unthinkable as the transmutation itself. Besides potential actuality, whatever its nature, must have had antecedents, and an inquiry into them would bring us around again into the same difficulties which it is the object of the hypothesis to avoid. Next we will suppose the first manifestation belonging to the universe to have been the sequence of some manifestation not included in the manifestations of the universe. That we may deal, as much as possible, in familiar thoughts, let us imagine that at the inauguration of the universe there were present manifestations to which, when viewed collectively, we can attribute personality, just as we attribute personality to those collec-

tions of manifestations called our fellows. And let us imagine also that one of the manifestations belonging to this personality was the act of creation—a manifestation from which followed the initiatory manifestation of the universe. You are asked to frame a thought that will baffle your powers. There are *some* manifestations, belonging to the universe, which can have had no creation—which are sequences from nothing but their former selves. No first material manifestation can be imagined. Matter in its remotest known form, is always thought of as the product of Matter in some unknown form. The same is true of Motion. If the phenomenon, Space, was brought about by some preceding phenomena, it must have been sometime absent. A time when Space was absent, however, is inconceivable. Indeed the phenomenon of creation is always imagined as taking place somewhere in Space. Time calls for the same comments as Space. One more difficulty, inherent in the last hypothesis, remains. Turning to pre-universal phenomena, we cannot but entertain the question of derivation; yet if we do, we find the difficulties we struggle to escape again confronting us.

Who shall lead us out of this maze? Perhaps the author. Let us see what solution he has to offer. "All the apparent proofs that something can come out of nothing, a wider knowledge has one by one cancelled. The comet that is suddenly discovered in the heavens and nightly waxes larger, is proved not to be a newly created body, but a body that was until lately beyond the range of vision. The cloud which in the course of a few minutes forms in the sky, consists not of substance that has just begun to be, but of substance that previously existed in a more diffused and transparent form. And similarly with a crystal or precipitate in relation to the fluid depositing it. Conversely, the seeming annihilations of Matter turn out, on closer observation, to be only changes of state." (First Prin., § 52.) "The annihilation of Matter is unthinkable for the same reason that the creation of Matter is unthinkable." (First Prin., § 53.) "Could it be shown, or could it with any rationality be even supposed, that Matter, either in its aggregates or in its units, ever became non-existent, there would be need either to ascertain

under what conditions it became non-existent, or else to confess that Science and Philosophy are impossible." (First Prin., § 52.) Of Motion he speaks similarly. "Motions, visible and invisible, of masses and of molecules, form the larger half of the phenomena to be interpreted; and if such motions might either proceed from nothing or lapse into nothing, there could be no scientific interpretation of them." (First Prin., § 55.) In another place (First Prin., 53) he explains that "it is impossible to think of something becoming nothing, for the same reason that it is impossible to think of nothing becoming something. . . ." The eternal persistence, or self-existence, of manifestations of Matter and Motion is, then, firmly believed in by Mr. Spencer. He manifests no repugnance to the infinite series involved, which is something of which he warned us to beware. How near he comes to occupying our former position may be best known from the following comprehensive statement of the universal retrospect and prospect. "This rhythm of evolution and dissolution, completing itself during short periods in small aggregates, and in the vast aggregates distributed through space completing itself in periods which are immeasurable by human thought, is, so far as we can see, universal and eternal. . . ." (Pop. Sci. Monthly, Oct., 1882.) Thus Mr. Spencer professes belief that the Universal Manifestation is a rhythmical activity of substance pervading all Space and persisting throughout beginningless and unending Time.

§ 33. It appears, then, that all the perplexities which were pointed out as resulting from the attempt to formulate Being, are similarly consequent upon the endeavor to formulate Appearances. And, which is more remarkable, it appears that Mr. Spencer has been detected in disregarding every one of them. In consistency, therefore, he could not have complained if we had chosen to do the same. But the fact is, that the choice was to attempt the very opposite, and we see we have happened upon a justification for so doing. Every philosophy aims at the establishment of congruity. No philosophy can attain congruity while these perplexities remain; consequently,

if any philosophy is to reach its goal, they are explicable. On the supposition that they are explicable, unless other explanations are to be had, those given must be received.

Further important results are to be gathered. Perhaps we have been tracing an analogy applicable to more than the instances that have come before us. Perhaps we have reached a generalization which, if duly realized, would put an end to the kind of argument we have been reviewing. We will inquire if the likeness of the mysteries, which confront respectively the Noumenal and the Phenomenal Philosophies, does not result from some likeness between these two Philosophies. In this they may be said to agree: that we perceive nothing but appearances. Without noting a disagreement, the concurrence is inappreciable. The one holds that we look upon things in a measure appearing as they are; the other that the appearances which we look upon are not in any measure components or semblances of things. The one persists in partly identifying the appearance with the reality outside of consciousness, while the other wholly "transfers the appearance into consciousness and leaves the reality outside." (First Prin., § 46.)

Unknown appearances are a necessary and legitimate subject of inquiry for each. This truth is much obscured by its complexity. It is sufficiently obvious that if appearances are modes of things, we can philosophize about appearances absent in space, and appearances absent in time; appearances too great for our faculties, and appearances which cannot be presented to us because they are too minute. But it is far from sufficiently obvious that if appearances are only modes which things produce within the mind, a purely inferential appearance is not an absurdity. Consequently this last truth must be elucidated. It is well known that neither Mr. Spencer nor any other agnostic philosopher confines his speculations within the limits of perception. It is readily realized that to do so would be to preclude the possibility of a philosophy. On what theory, then, do these philosophers proceed? Their theory I shall now attempt to set forth.

Besides the appearances wrought in us directly through our

senses, there are appearances wrought in us indirectly through other appearances. Thus, when the appearance hardness is perceived in total darkness, it carries with it the appearance color. Though we cannot say that the mode of the External Cause which wrought the hardness, wrought also the color contemplated; we can say that the External Cause, considered as a whole, wrought both effects, because, by previous uniformity, it caused one to be produced upon production of the other. Besides this simple example, others might be given in which, through appearances indirectly produced, others are similarly produced; in which the inference made is not the only one that could be made; and in which the appearances inferred are not such as have ever been directly produced. In addition, it might be shown how, from the constant verification of inferred appearances, we learn to place implicit reliance on inferred appearances which can never be verified. But it is the meaning of reliance on inferred appearances which alone needs much explanation. It means that the mental mode present in the act of conception is regarded as no less the obverse of some extra-mental mode than the mental affection present in the act of perception. It may mean belief that the inferred appearance would be directly produced if certain other appearances were directly produced; or it may not mean so much. It may mean no more than confidence that the inferred appearance is, in the world of thought, the equivalent of some mode in the world beyond. Thus much, at least, it always means. Now we know why we were so well able to turn the questions addressed to us, back upon the questioner. Now we have an explanation of that irresistible tendency to seek appearances answering (as they say) to even those modes of things which do not, and never can, affect the senses. They are constituents of the world of thought; and thought can never be completely organized while the least of them is lacking. By means of them, we reason from experience to experience, separated by a gap which experience could never fill. By means of them, we pass beyond the circumference of all possible experience. Constructed by analogy with direct impressions, they bear the same relation to insensible external

modes, as direct impressions bear to the external modes which make them. They are the obverse of whatever is external and insensible; and as such, must be sought for until none remain unknown, but not finally accepted until they are reduced to complete congruity.

We may now proceed with our analogy. However our theories of knowledge may differ, we contemplate precisely the same direct appearances. Though we may differ as to which of such appearances are real, yet, were the truth known, the same would be pronounced real by all. Exactly the same is true of our inferred appearances. While we differ as to which are properly inferred, the difference is due to some one's inadvertence. There is not one set of appearances with which the Noumenal Philosophy must start, and one set of inferences which it must make; and another set of appearances with which the Phenomenal Philosophy may start, and another set of inferences which it may make; but they must, from the same direct appearances, obtain the same inferred appearances. Should there, then, occur, in the synthesis of appearances, an incongruity or an omission which is necessitated by irrepressible direct appearances and unavoidable inferences from them, it would be equally preclusive of the two Philosophies. Neither can obtain the advantage by arbitrarily limiting its sphere to certain kinds of appearances, because the same appearances are thrust upon the cognizance of both. Neither can do otherwise than synthetize all persistent appearances into a complete and harmonious whole, or confess its own incompleteness.

There is another, perhaps a better, method of presenting the fundamental analogy now in view. Realism and Transfigured Realism may concur in calling all ideas of things external to consciousness symbols. They disagree, of course, concerning the natures of these symbols and what they empower us to do. Realism holds that the symbols, being in many respects like things, are, in many respects, substitutes of things for purposes of contemplation. Transfigured Realism holds that the symbols resemble noumena in respect of existence only, and therefore enable us to contemplate nothing noumenal besides existence.

Notwithstanding so great a variance, there is concurrence in that the symbols of thought must form a complete set and admit of congruous combination. Whenever a symbol is wholly or partly wanting, the deficiency must be supplied; whenever one is found incongruous internally or with the preponderance of the rest, it must be rejected as illegitimate. For one Philosophy to ask the other to reject a number of symbols because there is a vacancy or an incompatibility among them, is to acknowledge its own obligation to reject them. If it will not reject them, it cannot compel its antagonist to do so. A number of persistent symbols presenting irremediable deficiency and conflict, would be an everlasting obstruction to the completion of even an idealistic philosophy.

§ 34. Conformably to necessity, Mr. Spencer elects to retain the symbols which he denies to the Realist. As we have seen, he endeavors, in a manner which Realism approves, to develop them into harmonious completeness. It must be added that he encounters one problem which Realism escapes, and leaves it unsolved.

Choose any symbol of reality beyond consciousness, and ask yourself—How does the mode of "The Unknowable" which this symbolizes differ from it? To answer this, you must form another symbol, in regard to which the same question arises; and so on *ad infinitum*, unless you can sometime reach a symbol which is like the thing for which it stands. Suppose you try to evade this infinite series of problems by employing the same symbol as often as the question is put—suppose you say with Mr. Spencer, that, the consciousness of Force being the ultimate symbol, all modes of "The Unknowable" must be symbolized by Force. Then when we ask you how you symbolize the non-resemblance of "The Unknowable" to its symbol, you must answer—by Force. Force, then, is the symbol of the contrast with itself. This is very absurd; but it does not reach the climax of absurdity. When you are asked how you symbolize the consciousness of Force you must, unless you will allege that a state of consciousness is symbolized by something

unlike itself in the very respect in which it is symbolized, answer—by Force. Force is, then, the symbol of itself and the symbol of “The Unknowable”: hence Force and “The Unknowable,” the symbol and the thing, are like. Thus there proves no alternative for Transfigured Realism but to proceed with its infinite series of problems, giving a different answer every time. It cannot make any symbol of externality the second time the symbol of the mode for which it stands; it cannot make any permanent symbol of externality the symbol of the symbol. Always there will be a question ahead and a necessity to answer it. Realism encounters no such difficulties; since, in as far as the symbol is likened to the thing, the question of how to symbolize the thing anew is erased from thought. Assert an Unknowable and you encounter all the problems of Realism and more.

CHAPTER VII.

THE DEDUCTIVE ARGUMENTS.

The Process of Comprehension.

§ 35. We pass now to the author's deductive considerations. The following (First Prin., § 23) is the first of this class.

"If, when walking through the fields some day in September, you hear a rustle a few yards in advance, and on observing the ditch-side where it occurs, see the herbage agitated, you will probably turn towards the spot to learn by what this sound and motion are produced. As you approach, there flutters into the ditch, a partridge; on seeing which your curiosity is satisfied — you have what you call an *explanation* of the appearances. The explanation, mark, amounts to this; that, whereas throughout life you have had countless experiences of disturbances among small stationary bodies, accompanying the movement of other bodies among them, and have generalized the relation between such disturbances and such movements, you consider this particular disturbance explained on finding it to present an instance of the like relation. Suppose you catch the partridge; and, wishing to ascertain why it did not escape, examine it, and find at one spot, a slight trace of blood upon its feathers. You now *understand*, as you say, what has disabled the partridge. It has been wounded by a sportsman — adds another case to the many cases already seen by you, of birds being killed or injured by the shot discharged at them from fowling-pieces. And in assimilating this case to other such cases consists your understanding of it." In like manner, Mr. Spencer carries the reader through several further steps of investigation, to illustrate a generalization which we shall permit him to disclose.

"Observe now what we have been doing. Turning to the general question, let us note where these successive interpreta-

tions have carried us. We began with quite special and concrete facts. In explaining each, and afterwards explaining the more general facts of which they are instances, we have got down to certain highly general facts. . . . The particular phenomena with which we set out, have been merged in larger and larger groups of phenomena; and as they have been so merged, we have arrived at solutions that we consider profound in proportion as this process has been carried far. Still deeper explanations are simply further steps in the same direction." From the induction thus set forth, Mr. Spencer proceeds to deduce the unknowableness of noumena.

"Is this process limited or unlimited? Can we go on for ever explaining classes of facts by including them in larger classes; or must we eventually come to a largest class? The supposition that the process is unlimited, were any one absurd enough to espouse it, would still imply that an ultimate explanation could not be reached; since infinite time would be required to reach it. While the unavoidable conclusion that it is limited (proved not only by the finite sphere of observation open to us, but also by the diminution in the number of generalizations that necessarily accompanies increase of their breadth) equally implies that the ultimate fact cannot be understood. For if the successively deeper interpretations of nature which constitute advancing knowledge, are merely successive inclusions of special truths in general truths, and of general truths in truths still more general; it obviously follows that the most general truth, not admitting of inclusion in any other, does not admit of interpretation. Manifestly, as the *most* general cognition at which we arrive cannot be reduced to a *more* general one, it cannot be understood. Of necessity, therefore, explanation must eventually bring us down to the inexplicable. The deepest truth which we can get at, must be unaccountable. Comprehension must be something other than comprehension before the ultimate fact can be comprehended."

Muse awhile upon the dogma to which we have been introduced. Can the author mean to tell us that a fact is to be explained only by likening it to the less intelligible? Can he

mean to say that the first step towards the comprehension of a fact consists in assimilating it to facts not so capable of comprehension? that further steps of the process are but further inclusions of the fact with obscurer facts? and that the clearest understanding is attained upon categorizing the fact with the absolutely inscrutable? He can mean nothing else. Strange, then, and numerous are his oversights. A moment's reflection, had he thought it necessary, would have suggested to him that a fact cannot become comprehensible in proportion as it ceases to be comprehensible. Classification, making one fact comprehensible, should, by the same magic, make its fellow members comprehensible also. Consequently the largest class should be the best understood; or, to vary the expression, the most general truth should (it having no existence apart from the facts which are its exemplifications) be the one most completely realized. Out of the implications of the argument may we thus weave its refutation.

It may be disposed of by *reductio ad absurdum*. At every step in the direction of more extensive classification of facts, some of their individual elements must be dropped. Extension and intension accompany each other in inverse proportion. The consequence of this principle is, that when the maximum of classification, and consequently of comprehension, has been reached, there will be retained a minimum of elements. Such minimum of elements must be a single element; for if it were a plurality of elements, the cognition of them would be a cognition of facts not to be assimilated to each other or to other facts—not to be assimilated at all. As each other element has already been cast aside as unclassible, each has proved incomprehensible. The universal element must, then, be the only element of a fact that the mind can grasp. But neither, on the other hand, can it be known; for it can be classed with nothing. Nothing, therefore, can be known. The same result, in its concrete form, may be arrived at by another process. There is no attribute which Mr. Spencer will assert to be possessed by all things actual except *existence*. Similarity in this respect is, he would say, the only one by which they can be bound together

in a universal class. From this it is inferable that the most thorough comprehension of facts consists in contemplating their existence only. Existence seems, indeed, to be all that we can comprehend about them. In the process of constructing the most general class, all other attributes have been rejected as unclassible. Though we have classed facts together because of their common possession of some of these attributes, yet we have at the end of such classifications been compelled to reject them as of no aid to comprehension. In as far as the facts grouped together were unlike, there was, by admission, no comprehension; and in as far as they were alike, they consisted of an element which, being unique, could not be comprehended. We have the same grounds, however, for pronouncing the universal element incomprehensible. Existence cannot be identified with what is not existence; and if it could, we would obtain an unclassible something by the fusion. If existence or what is not existence cannot be comprehended, nothing can. Surely the conclusions to which the argument leads proclaim its great absurdity.

We may meet it by a direct denial. Comprehension of a fact does not necessarily consist in merging it "in larger and larger groups of phenomena." Wishing to illustrate this truth, I shall employ the instances cited by Mr. Spencer. On hearing a rustle and seeing the herbage agitated, you seek an explanation. When you have learned that the disturbance was due to the movements of the bird, you consider the explanation found. What, in this case, is the explanatory act? It is the reduction of an instance of disturbances in general to an instance of disturbance caused by a partridge. You have ceased to contemplate the fact as one of the vast and indefinite class of disturbances, and learned to contemplate it as one of the less general, but more definite, class of a particular kind of disturbance. "Suppose you catch the partridge; and, wishing to ascertain why it did not escape, examine it, and find at one spot, a slight trace of blood upon its feathers. You now *understand*, as you say, what has disabled the partridge. It has been wounded by a sportsman. . . ." At first you did not

understand the bird's disability, because you could not abstract it from the large class of disabilities. But now you have a better understanding of it, having found it to belong to the comparatively restricted class of wounds on the wing. What caused the wound? This you do not understand while the cause is thought of only as one of the very extensive class of probable causes. The understanding comes when the cause is recognized as belonging to a much less extensive class—the class composed exclusively of discharges from fowling-pieces in the hands of sportsmen. In these instances, comprehension is forwarded by merging the fact to be explained in a less numerous group of facts than that to which it was first recognized as belonging.

Enough has been elicited to put us upon inquiry. Classification seems to be an aid to comprehension; but not in proportion to its generality. Other things being equal, there would doubtless be a direct correspondence between the degree in which a truth is known and the number of truths to which it is perceived to bear a resemblance. But, then, these other things, which are usually very unequal, are of preponderating importance. It is very sure that one analogous truth, clearly and firmly grasped, will afford more aid than a thousand vaguely apprehended. No one expects to solve a mystery by determining that it is one of a class of mysteries. The reason that the observation of analogy so often facilitates the understanding of a truth is because it is an assimilation of that which we strive to understand to that which is, in a further degree, understood.

Again, there is an aid to comprehension which, besides being complementary to classification, is exclusive of it. This aid is distinction. Before long we shall find Mr. Spencer arguing that nothing can be known except what presents contrast with everything else. On adherence to such doctrine I here insist. The complete assimilation of all truths would leave no truth known. As long as a single truth is indistinguishable from all others, we cannot be said to have a cognition of it. The moment it becomes distinguishable in any degree, a smaller class only will include all that is distinguishable in it. Its peculiarities are not embraced in the largest class because all

things have not the same peculiarities. Likewise it is evident that what is indistinguishable from the other members of a very large class cannot be very thoroughly understood. It may be better understood by bringing to view its contrasts with fellow members; but if this be done, there will be observed peculiarities about it which are common to only the members of a still smaller class. Every step towards more complete distinction is a step from universal assimilation. Some attribute appears at every stage which will not merge in the class last contemplated. The more completely a fact is distinguished, the more completely it is brought within the mental grasp. The difficulty of understanding the cause of the wound, for instance, was due to its indistinguishability from other supposable causes. By relegating it to a sub-class, it was made to manifest the distinctions common to that class, and so became better known. In this way is classification often employed as an auxiliary of distinction; but usually when it is, it will be found to be less general classification. Proceeding with the process of distinction, whether aided or not aided by classification, a point must be reached at which further assimilation is impossible, but past which, distinction must and does advance. While even two facts are indistinguishable, neither is known; since when we think we know one we may be really nearer knowing the other, and *vice versa*. As a matter of fact, too, that which is spoken of as known is distinguished not only from something else, but from all things else. Even that, which is in the least degree known, is so distinguished. The cause of the wound was set apart in the imagination before as well as after recognition. It was known to be, *inter alia*, what no other cause could be, the cause of the particular effect in contemplation. Something distinguishes any fact which can be named from everything else in the universe which has been observed or can be imagined. We, in every case, realize this something but cannot classify it. It is no answer to say that qualities which exclude a fact from one class admit it to some other, and so all that is known of it is classed. Admitting the verity of this proposition is an allowance that all things known

are classed; but not that all distinction may be eliminated. By no means, however, is it to be admitted. The same attribute is not absolutely the same in two objects. The existence of this is not the existence of that. Stronger vindication is forthcoming. Calling, as we may do, the combination of attributes belonging to anything, an attribute, we are able to recognize in any fact an attribute of which there is no counterpart among all that is. Attributes of this attribute need not be dwelt upon; for they too are involved in the last remark. After all similarities have been cancelled, something must remain. Whatever remains is known independent of assimilation. Nor is it insignificant: it belongs not only to every individual object of cognition, but to every class; it is found not only in every whole, but in every part. Knowledge of the unlike is more extensive than knowledge of the like. Summing up what has been said regarding distinction, by the observation that truth, being heterogeneous, cannot be reduced to homogeneity, let us note that there are relations, heretofore left out of consideration, of which comprehension is not entirely independent. The relations of cause and effect, whole and part are such. It is probable Mr. Spencer would include them in relations of unlikeness. In them, nevertheless, may be discovered more than mere unlikeness. Sufficient for the argument, is it that they are not relations of likeness. No longer need we hesitate to repudiate the exorbitant claims made on behalf of classification. As it depends upon them, the argument is null.

It may be nullified by citing Mr. Spencer to the contrary. Something over a hundred pages after the argument in hand, the reader's curiosity to know what the most general truth is supposed to be, is gratified. Says Mr. Spencer: "As before shown (§ 23), we cannot go on merging derivative truths in those wider and wider truths from which they are derived, without reaching at last a widest truth which can be merged in no other, or derived from no other. And whoever contemplates the relation in which it stands to the truths of science in general, will see that this truth transcending demonstration, is the

Persistence of Force." (First Prin., § 61.) On the next page he discloses what he means by the "Persistence of Force." "By the Persistence of Force, we really mean the persistence of some Cause which transcends our knowledge and conception." To avoid the suspicion of having asserted of the Ultimate Cause more than existence, he explains (First Prin., § 65) the meaning of "persistence." "The assertion of an existence beyond consciousness, is itself an assertion that there is something beyond consciousness which persists; for *persistence is nothing more than continued existence*, and existence cannot be thought of as other than continued." This is not what we had a right to expect. The continued existence of an unknowable cause is not the denomination to which all truth belongs. We have not been made acquainted with a universal class. The cause is not to be assimilated to the effect. Mr. Spencer must have given up the relation of likeness as the fundamental aid to comprehension. In its stead he must have adopted the relation of cause and effect. All effects are to be explained by the continued existence of the cause. A very meagre basis of explanation it would seem, on reflecting that we are denied a knowledge of the kind of existence which is continued. But it is something other than the sufficiency of the explanation which is to be here arraigned. The variance between what Mr. Spencer demanded and what he has produced is the subject of present animadversion. Formerly the highest degree of comprehension of facts was to be attained by classing them with the incomprehensible; latterly it is to be attained by attributing them to the incomprehensible. Mark, also, that they are to be made understandable by attributing them to that attribute of "The Unknowable" which is the only one known—its continued existence. Through a known cause, not through unknown doubles, are things to be understood.

I have no wish to hold Mr. Spencer to his professed theory of the process of comprehension. If he will, let him cling to the one implied. When we are called upon to oppose the proposition that all knowledge is through the relation of causality, we shall have no difficulty in meeting it. In the first

place, we may put in the claims of many other relations. Secondly, we may show how little is really known through this relation. Thirdly, we may maintain that only a known cause will explain its effects. And fourthly, we may argue that the uncaused can sometimes (as indeed the caused may) be known through its effects; and that, as it exists independent of a cause, there is nothing in its nature which it requires a cause to explain.

A more abstract proposition—one that will apply to any and all relations—is more likely to be urged against us. Not many would think it absurd to insist that truth can be known only through other truth, and that, therefore, the most important truth cannot be known. The present is a good occasion for disposing of an entire class of arguments which, alone and together, are fitted to annoy us. It is *a priori* absurd that a known truth should be derived from that which is unknown. The mutuality of relation suggests a better supposition. A's being known through its relation to B, does not preclude B's being known through its relation to A. Distinction is a relation that illuminates both its terms. So do all others. Needless, then, is it to find a fact underlying all other facts. If, however, any seek it, they should expect to learn that it needs no explanation. That through which all else is realized, be it one truth or many, must itself be fitted for independent realization.

§ 36. Special applications of the doctrine that a thing can be known only in so far as it is classed, must be duly examined. Of these there are two: one relating to the Substance of Mind, and one relating to "The Unknowable" in general. The latter will be discussed in the succeeding chapter; the former shall be considered here.

Attempts to disprove an immediate knowledge of Mental Substance I pass over as, although questionable in method, at least laudable in aim. On denial of the conceivability of Mental Substance, however, I join issue. What is now to be cited opposes alike the perceptibility which I deny and the conceivability which I affirm.

“Again, to know anything is to distinguish it as such or such—to class it as of this or that order. An object is said to be but little known, when it is alien to objects of which we have had experience; and it is said to be well known, when there is great community of attributes between it and objects of which we have had experience. Hence, by implication, an object is completely known when this recognized community is complete; and completely unknown when there is no recognized community at all. Manifestly, then, the smallest conceivable degree of knowledge implies at least two things between which some community is recognized. But if so, how can we know the substance of Mind? To know the substance of Mind is to be conscious of some community between it and some other substance. If, with the Idealist, we say that there exists no other substance; then, necessarily, as there is nothing with which the substance of Mind can be even compared, much less assimilated, it remains unknown. While, if we hold with the Realist that Being is fundamentally divisible into that which is present to us as Mind, and that which, lying outside of it, is not Mind; then, as the proposition itself asserts a difference and not a likeness, it is equally clear that Mind remains unclassible, and therefore unknowable.” (Prin. of Psy., § 59.)

As opposed to the Realist, the argument is that, since Substance of Mind must be contrasted with everything else, it is unknowable. For the same reason—for the reason that there is nothing else with which to class it—it follows that what is not Substance of Mind is unknowable, that nothing is knowable. Sufficient as this reduction to absurdity is, we do not depend on it alone. We have seen that everything we do know is contrasted with all and everything else within our knowledge. We have seen also that contrast is one of the greatest aids which struggling comprehension finds. We are not now to be persuaded that Substance of Mind is unthinkable merely because it is unlike something, in that the latter is external to its sphere.

To these considerations may be added others not previously advanced. Mr. Spencer was bound to prove Mental Substance totally inconceivable. Granting his mode of reasoning sound,

it was not sufficient to point out a slight contrast: an absolute unlikeness was called for. But an absolute unlikeness was not to be shown. Mental Substance is supposed to be the substratum of states of Mind, sustaining them in a manner at least analogous to that in which matter sustains very complicated systems of motion. Some go so far as to think that Substance of Mind is a kind of matter, and that consciousness is a kind of motion. Either view is exempt from Mr. Spencer's stricture, since either asserts the required resemblance. From his point of view, as well as our own, we may point out to him further analogy. As other substance is external to Mental Substance and internal to its own realm, so is Mental Substance external to other substance and internal to its own realm. Both present quantity, whole and part. Both present quality and relation. Both present change and permanence; for each is substance.

Though the argument proves bad in both premises,—though no ignorance of Mental Substance has been demonstrated, we should be ever ready to confess it in a comparative degree. While the Mind is wonderfully familiar with what lies beyond, it is woefully ignorant of its own constitution. Nevertheless, we must persist in retaining and employing the conception of Mental Substance which has grown up within us. Vague it is, but not void; lacking form, but not formless. Inchoate it may be, but promising great development.

CHAPTER VIII.

THE DEDUCTIVE ARGUMENTS CONTINUED.

The Unconditioned.

§ 37. The next specimen of agnostic argumentation is rather three than one. But its components are so well co-ordinated that it shall be considered, what its propounder considered it, one composed of three parts. The last of these was, in the preceding chapter, partly disposed of. What familiarity with it we have acquired will be of service when we meet it again.

In stating the three-fold argument with which we are about to come face to face, Mr. Spencer has availed himself of considerable quotation from Hamilton and Mansel. This a courtesy to them, which is no kindness to the reader. To the reviewer, the circumstance is still less propitious. He must sift out for discussion only what is of the essence of the argument, rejecting not only what Mr. Spencer afterwards expressly repudiates, but all that he is at liberty to repudiate. As he has summarized the argument, we have the advantage of knowing what he intended its general character to be. With this recapitulation, he brings it to an end: "A thought involves *relation, difference, likeness*. Whatever does not present each of these does not admit of cognition. And hence we may say that the Unconditioned, as presenting none of them, is trebly unthinkable." (First Prin., § 24.)

§ 38. First of difference. What on this subject is quoted from Sir William Hamilton is the following: "all that we know either of subject or object, either of mind or matter, is only a knowledge in each of the particular, of the plural, of the *different*, of the modified, of the phænomenal." (First Prin., § 24.)

Erase the word "phenomenal," or use it in a certain sense, and we shall have no reason for denying this. It certainly implies that "The Unconditioned" is unthinkable; but this is rather favorable to our view that nothing is unconditioned. In both the material and mental worlds, we expect to find particularity, plurality, *heterogeneity*, and the quality of being modified. They who hold a contrary opinion of the nature of realities are the only ones whom the above-quoted dictum does not favor.

Let us hear what Mr. Mansel has to say for Mr. Spencer on the subject of difference.

"The very conception of consciousness, in whatever mode it may be manifested, necessarily implies *distinction between one object and another*. To be conscious, we must be conscious of something; and that something can only be known, as that which it is, by being distinguished from that which it is not. But distinction is necessarily limitation; for, if one object is to be distinguished from another, it must possess some form of existence which the other has not, or it must not possess some form which the other has. But it is obvious the Infinite cannot be distinguished, as such, from the Finite, by the absence of any quality which the Finite possesses; for such absence would be a limitation. Nor yet can it be distinguished by the presence of an attribute which the Finite has not; for, as no finite part can be a constituent of an infinite whole, this differential characteristic must itself be infinite; and must at the same time have nothing in common with the finite. We are thus thrown back upon our former impossibility; for this second infinite will be distinguished from the finite by the absence of qualities which the latter possesses. A consciousness of the Infinite as such thus necessarily involves a self-contradiction; for it implies the recognition, by limitation and difference, of that which can only be given as unlimited and indifferent." (First Prin., § 24.)

The application of these remarks will be known when it is said that one of the supposed peculiarities of "The Unconditioned," is infiniteness in respect of every attribute of every

thing. Willingly will we predicate of it infiniteness in the number and degree of its absurdities. Unhesitatingly will we carry further Mr. Mansel's criticism. That is infinitely removed from possibility, which has contradictory attributes in an infinite number and degree. Stranger yet does it seem, when we reflect that this, which must have so many attributes, can have only one. Had it more, each would limit the other and limit the whole. Nor can it have both substance and attribute; for each, and their sum, would be limited by the other; yet not either can exist alone. Consciousness, too, has a word to say. We have immediate knowledge of finite things; and the existence of these implies the non-existence of the Infinitely Infinite.

But the Infinite which thus proves to be unlimitedly ridiculous, is not identical with those external things of which we assert infiniteness. Space, we say, is infinite; meaning, not that it is infinite in every quality imaginable, nor even that it is infinite in every quality belonging to itself, but that it is infinite in extent. Mr. Spencer, when in quest of evidence that infinite space is inconceivable, did not think it pertinent to suggest that we cannot conceive space as infinitely righteous, infinitely active, or infinitely hot. If, however, that which is infinitely something must be infinitely everything, such reasoning would be conclusive. It is as inconclusive as could well be, for the reason that there is no tendency to attribute to anything infiniteness in respect of more than a very limited number of qualities. To Divinity even are ascribed but a few qualities unlimited in degree. The majority of attributes are not ascribed to Divinity at all. We conceive anything infinite to be in some way limited. This is true of the whole External Universe. Call it infinite, but keep in view in what respects it is, and in what it is not infinite. Do not from infiniteness in spacial or temporal extent drift to the conclusion that it is incongruous with the limitedness which contrast indicates.

The part of the argument which relates to difference we have found to show the absurdities of something which we deem both unthinkable and non-existent; but to leave unaffected all that we consider existent and known.

§ 39. Next of Relation—the relation between subject and object. This is the way Sir William Hamilton reasons from it. “Thought cannot transcend consciousness; consciousness is only possible under the antithesis of a subject and object of thought, known only in correlation, and mutually limiting each other.” (First Prin., § 24.)

By this, it is supposed, the Infinite is proved incognizable. As above it was contended that other objects limited it, so it is here contended that it is limited by the subject. The answer before given is efficient here. The Infinite in every respect cannot exist at all; the infinite in some respects can co-exist with other things. The subject is not exclusive of it.

By the considerations last cited, the Absolute also is supposed to be proved incognizable. The reason of the attempt to establish the incognoscibility of the Absolute is that it, like the Infinite, is presumed to be comprehended in “The Unconditioned.” Since an object of thought is “known only in correlation” with the subject, it is argued that the “Unrelated” or Absolute cannot be an object of thought. The argument would be relevant if we believed in the existence of something unrelated; but we do not, and cannot. Everything we believe existent, we believe to be related to every other thing; though we consider some things not to be dependent upon the relation in which we find them, and for this reason call them absolute. Thought does not create its object, but the object exists before, after, and independent of the thought. Correlated, but independent of the correlation, is what we predicate of the Absolute.

Further discussion of the Absolute will be necessary after we have listened to Mr. Mansel on the subject of relation.

“A second characteristic of Consciousness is that it is only possible in the form of a *relation*. There must be a Subject, or person conscious, and an Object, or thing of which he is conscious. There can be no consciousness without the union of these two factors; and in that union each exists only as it is related to the other. The subject is a subject, only in so far as it is conscious of an object: the object is an object, only in so far as it is apprehended by a subject: and the destruction of

either is a destruction of consciousness itself. It is thus manifest that a consciousness of the Absolute is equally self-contradictory with that of the Infinite. To be conscious of the Absolute as such, we must know that an object, which is given in relation to our consciousness, is identical with one which exists in its own nature, out of all relation to consciousness. But to know this identity, we must be able to compare the two together; and such a comparison is itself a contradiction. We are in fact required to compare that of which we are conscious with that of which we are not conscious; the comparison itself being an act of consciousness, and only possible through the consciousness of both its objects. It is thus manifest that, even if we could be conscious of the absolute, we could not possibly know that it *is* the absolute: and, as we can be conscious of an object as such, only by knowing it to be what it is, this is equivalent to an admission that we cannot be conscious of the absolute at all. As an object of consciousness, everything is necessarily relative; and what a thing may be out of consciousness, no mode of consciousness can tell us." "An object of thought exists, as such, in and through its relation to a thinker; while the Absolute, as such, is independent of all relation." (First Prin., § 24.)

What is the substance of that said about the Absolute? It has not been described, we must first observe, as that which is out of all relation, but merely as that which is "independent of all relation." Being independent of relation, Mr. Mansel thinks it cannot be known as it is. Assuredly it cannot be known out of relation to consciousness. Neither, reasons Mr. Mansel, can it be known in such relation; for "the object is an object, only in so far as it is apprehended by a subject;" "an object of thought exists, as such, in and through its relation to a thinker." Here the fallacy emerges. How would those of Mr. Mansel's persuasion content themselves with the conclusion that an object of thought, as such, presents no attribute except that of being an object of thought? Not at all; yet this is the conclusion to which his reasoning leads. In and through its relation to thought, an object of thought is an object of

thought and nothing more. But it is more; therefore, it is something independent of this relation. Did objects of thought present nothing but objectivity, nothing that is objective, they would be all alike: that they are unlike shows that they do present something besides objectivity. May not this something be, in some cases, not dependent upon anything else? Undoubtedly, unless we imagine that what depends upon other things for one attribute depends upon them for all. This we cannot do. Though the Absolute depend upon a thinker for its being an object of thought, it does not depend upon a thinker, as such, for its being whatever it is more than this. So much of it is independent that we call it absolute. As the Absolute is further known than as a mere object of thought, there is no incongruity in saying that it is known as absolute. But is not a knowledge of its absoluteness a knowledge of it out of relation to the mind? By no means: while in such relation we can perceive that cognition depends upon its being, not its being upon cognition. To the objection that from this may be deduced the conclusion that it would exist even if it were not known, the reply is that this conclusion is legitimate. We can think of an object's co-existing with our utter ignorance of it. If I had not found a pretty pebble on the beach, I would never have given it a thought; yet it would have continued to exist as it existed before I found it. This is no difficult thought. The relation in which the object was once known seems, on contemplation, not to be the occasion of the object's existence. "Still," it may be said, "the object is even now in a relation fundamentally like the one contemplated." So much the better: the relation contemplated being essentially like the relation of contemplation, and in fact like all other relations of cognition, stands for them all. The object existing independent of it, independent of its essence, exists independent of anything essentially like it. The conclusion is one which we cannot resist, and one which we can congruously conceive. Two ways of knowing that an object of thought is independent of cognition have been found. The knowledge is given immediately, in perception, and mediately, by conception.

Not even by defining the Absolute as that which cannot exist in relation, can Mr. Mansel's argument be made effective. We have the best evidence which the nature of the case permits, that there exists nothing answering the description. It is a strange absolute that depends upon the absence of relation for the possibility of its existence. If the Absolute is independent, it can exist in relation; and if it is not independent, it may as well depend upon relation as the want of it. Very much better, we may say, considering that it must exist in relation or not at all. Everything existing must be related in many ways to everything else. Relation does not conflict with independence. Space is independent of matter, though related to it. Within itself, too, it has, and must have, relations; but it is not in the ordinary sense dependent on them, nor they on it. The relation which the Absolute transcends is that of effect to cause. Whenever we find something which is not related to anything else as an effect to its cause, however it may be otherwise related, we may call it absolute.

That part of the argument which concerns relation, is very conclusive, as opposed to what we deny; but very inefficient, as opposed to what we affirm.

§ 40. Lastly of Likeness. On this subject, Mr. Spencer is the one who speaks. His theory of comprehension is presented in the conclusion, "that a thing is perfectly known only when it is in all respects like certain things previously observed; that in proportion to the number of respects in which it is unlike them, is the extent to which it is unknown; and that hence when it has absolutely no attribute in common with anything else, it must be absolutely beyond the bounds of knowledge." Following this is the application.

"Observe the corollary which here concerns us. A cognition of the Real, as distinguished from the Phenomenal, must, if it exists, conform to this law of cognition in general. The First Cause, the Infinite, the Absolute, to be known at all, must be classed. To be positively thought of, it must be thought of as such or such—as of this or that kind. Can it be like in

kind to anything of which we have had sensible experience? Obviously not. Between the creating and the created, there must be a distinction transcending any of the distinctions existing between different divisions of the created. That which is uncaused cannot be assimilated to that which is caused: the two being, in the very naming, antithetically opposed. The Infinite cannot be grouped along with something that is finite; since, in being so grouped, it must be regarded as not-infinite. It is impossible to put the Absolute in the same category with anything relative, so long as the Absolute is defined as that of which no necessary relation can be predicated. Is it then that the Actual, though unthinkable by classification with the Apparent, is thinkable by classification with itself? This supposition is equally absurd with the other. It implies the plurality of the First Cause, the Infinite, the Absolute; and this implication is self-contradictory. There cannot be more than one First Cause; seeing that the existence of more than one would involve the existence of something necessitating more than one, which something would be the true First Cause. How self-destructive is the assumption of two or more Infinities, is manifest on remembering that such Infinities, by limiting each other would become finite. And similarly, an Absolute which existed not alone but along with other Absolutes, would no longer be an absolute but a relative. The Unconditioned, therefore, as classifiable neither with any form of the conditioned nor with any other Unconditioned, cannot be classed at all. And to admit that it cannot be known as of such or such kind, is to admit that it is unknowable." (First Prin., § 24.)

The above calls for nothing in the nature of explanation except, perhaps, the remark that "The Unconditioned" is considered to be the First Cause, "the Real as distinguished from the Phenomenal," the Actual as contrasted with the Apparent, as well as the Infinite and the Absolute. Some distance back, we were given to understand that "The Unconditioned" can bear no relations of difference. Now comes out the implication that it is not without them. "Between the creating and the created, there *must be a distinction* transcending any of the

distinctions existing between different divisions of the created. That which is uncaused *cannot be assimilated* to that which is caused; the two being, in the very naming, *antithetically opposed*. The Infinite *cannot be grouped along with* something that is finite; since, in being so grouped, it must be regarded as not-infinite. It is *impossible to put the Absolute in the same category with* anything relative, so long as the Absolute is defined as that of which no necessary relation can be predicated." Why, then, the endeavor to show that a distinguishable unconditioned is an absurdity? If "The Unconditioned" really is, to the extent which Mr Spencer claims, distinct from the Conditioned, to think of it as distinguished, is to think of it as it is. One of the two arguments must devour the other: if "The Unconditioned" transcends likeness, it is all distinction; if it transcends distinction, it is all likeness. Regard for Mr. Spencer would compel us to construe the arguments into an attempt to show the folly of trying to believe in the existence of an unconditioned, were it not that he actually believes that there is something without conditions, and believes that it is distinguished from the Conditioned to the extent which he implies. The argument from the necessity of distinguishing objects of thought is, therefore, the one which fails. Into the independent conclusiveness of the other we shall proceed to inquire.

The premise that a thing is comprehended in direct proportion to the generality, and in inverse proportion to the particularity, of the class to which it is thought of as belonging, warrants the conclusion that "The Unconditioned" is comprehended. The First Cause, the Infinite, the Absolute, the Noumenal, belong to the most general class; which, remember, includes whatever has existence. Even their distinctions belong to this class. To it all classes, including itself, belong. Every thing real belongs to it. In it "The Unconditioned" is classed with the Conditioned. According, then, to Mr. Spencer's test, nothing is better known than "The Unconditioned." The above premise also warrants the conclusion that the Conditioned cannot be known, and therefore nothing can be known. The Conditioned, as much as "The Unconditioned," presents abso-

lute particularity. It cannot be classed with any other Conditioned, because there is none; nor with any part, for between whole and part there must be an insuppressible distinction. For no portion, even, may an exact counterpart be found. There is nothing which is like everything else; nothing which is not unlike everything else. Point out all the resemblances you can find, and there will remain something which nothing resembles. Likeness upon likeness will not exhaust the unlikeness. Go back and examine any attribute which you have laid aside as matched. It cannot be completely likened to that which most resembles it. After all its similarities to other things have been noted, there will always remain a dissimilarity which can never be resolved into similarity. Begin again with any subdivision you may select, but you will end where you did before. There is no absolute similarity, and relative similarity proves to be only a less degree of dissimilarity. Analysis shows every thing and every attribute to be absolutely, though often not conspicuously, unique. That the mind cannot grasp the unique, means that it can grasp nothing. Besides *reductiones ad absurdum*, we have found a direct refutation possible. So far is distinction from being an impediment to comprehension, that it is to comprehension a most propitious circumstance. Were that which Mr. Spencer has called unconditioned, without distinction it would baffle even our apprehension. We should then be under the constant liability of confounding it with anything and everything, or we would take no cognizance of it at all. Fortunate for us that it is distinguishable.

Mr. Spencer should have shown, but did not show, that "The Unconditioned" is entirely unclassible. Does "The Unconditioned" consist of the peculiarities he has told us of, and nothing else? Unless we know it all, there is something more belonging to it. This, then, notwithstanding all said, may be capable of being classed. Giving Mr. Spencer's words the greatest weight which he could think of claiming for them, they do not carry conviction that "The Unconditioned" is entirely unclassible.

To other charges, may be added that of the argument's irrelevancy. It is not difficult to show that existences beyond consciousness may, without violating our conception of them, be classed with regard to the very attributes which have called forth so much discussion.

The First Cause, we will concede, cannot be classed with any other. Why this concession? Because all things self-existent and productive of effects, are (in abstract speculation) grouped together and called "the First Cause;" leaving, of course, no like group. In the same way, phenomena may be grouped together and called "the Phenomenal World." In the first case, no less than in the second, the problem is given ready solved. If the First Cause is a group, its components are already classed. Let us view this in the concrete. Time and Space are uncaused, or, if we prefer, perpetually self-caused. Either description gives us what we seek—the means of grouping components of the First Cause. Both Time and Space may be considered creating; since, besides perpetuating themselves, they are factors in the continual change of temporal and spacial relations: so we find a second attribute by which components of the First Cause are grouped. But the strongest position accessible to us has not yet been reached. In addition to classing component with component, we may class the whole with its components. Its description is, that which is self-existent and creating; and this is the description of every part.

There cannot, we must also concede be two things infinite in every regard; because, as Mr. Spencer says, "such Infinites, by limiting each other, would become finite." The concession is but a yielding of what we are anxious to repudiate. Such infinites as we think we discern in the realm of realities, are not supposed to have no limitations of nature. The point is gained if infinite Time and Space are not exclusive of each other, and may be classed together as limitless. A class of absolutes may also be asserted. This remark is not supposed to be true of absolutes which cannot exist in relation. It is true so long as the Absolute is defined as that which depends on no relation to any other thing for its existence. There is no relation to any thing else from which Space or Substance derive

their existence; and in view of this likeness they may be classed together as absolutes. Already it is shown that there are various groupings of the Actual or Real, as distinguished from the Phenomenal or Apparent; for they include self-existent causes, infinites, and absolutes. Instances of other groupings of things believed to lie out of consciousness, are so numerous that the mention of one might suggest a thousand. While Horse may be classed with Dog, Mr. Spencer should not flatter himself that he has proved that there can be no assimilation of things in themselves. It is remarkable that his argument treats of those outward realites which are in the extreme minority. To mankind at large, the External Universe presents little more than effects which are finite and relative: un-caused causes, infinites, and absolutes are in a high degree exceptional.

Instead of the fallacious reasoning which he employed, Mr. Spencer might have premised that "The Unconditioned" must be like everything else even to its parts, because distinction is condition; and then pointed out that the First Cause, the Infinite, and the Absolute, components of "The Unconditioned," do present distinction. Thus, might the unthinkability of "The Unconditioned" have been demonstrated. But we require no demonstration. The want of distinction is, as well as distinction, a condition. Nothing, we believe, can transcend either; nothing, we are sure, can transcend both. "The Unconditioned" is to us a non-existence, and we welcome anything which tends to banish it from thought.

That part of the general argument which deals with likeness proves to be as inefficient as the rest. It may be so reformed as to oppose what we deny; but it cannot be made to dispute what we proclaim.

§ 41. And now let us take a glance at the argument as a whole. Besides objections peculiar to certain portions, there is one which is applicable to each of its three divisions, and consequently to it all. Admitting that it proves a conception of "The Unconditioned" self-destructive, the objection is never-

theless sustainable that it does not attach to a certain realistic conception of the universe. Before we will admit that it proves something that exists unknowable, we must be satisfied that there exists an Unconditioned. And before admitting that it proves the Noumenal World unknowable, it must appear that "The Unconditioned" and the world outside of consciousness are co-extensive and identical. How much Mr. Spencer does towards filling up these gaps in his argument, will be the next subject of investigation.

§ 42. He will not agree with Hamilton that "the *absolute* is conceived merely by a negation of conceivability," nor with Mansel that "the *Absolute* and the *Infinite*" are, "like the *Inconceivable* and the *Imperceptible*, names indicating, not an object of thought or consciousness at all, but the mere absence of the conditions under which consciousness is possible." What are his reasons? "Observe in the first place, that every one of the arguments by which the relativity of our knowledge is demonstrated, distinctly postulates the positive existence of something beyond the relative. To say that we cannot know the Absolute, is, by implication, to affirm that there *is* an Absolute." (First Prin., § 26.) How so? Surely it will not be contended that proof of the impossibility of a certain conception, amounts to proof that there is something answering to such conception. To point out the contradictions involved in the thought of a round square, is not to assert, by implication, that there is a round square. One very important proposition, of which we remarked the want of proof, is that there exists an absolute answering Mr. Spencer's description. The use which he made of certain arguments, assuredly assumed the existence of such an absolute; but is it not a justification of the assumption of which we are even now in search? We have interrupted the author in the middle of a paragraph, and must read further. "The Noumenon, everywhere named as the antithesis of the Phenomenon, is throughout necessarily thought of as an actuality. It is rigorously impossible to conceive that our knowledge is a knowledge of Appearances only, without at the same time

conceiving a Reality of which they are appearances; for appearance without reality is unthinkable." Again we must be guilty of interruption. We cannot suffer Mr. Spencer to omit proof that "The Unconditioned" and the Noumenal are the same. That they are, is the second proposition which we observed he had yet to establish. While they may be supposed to differ, belief in the reality of the last will not be accepted as equivalent to belief in the reality of the first. Now we will hear Mr. Spencer out. "Strike out from the argument the terms Unconditioned, Infinite, Absolute, with their equivalents, and in place of them write, 'negation of conceivability,' or 'absence of the conditions under which consciousness is possible,' and you find that the argument becomes nonsense. Truly to realize in thought any one of the propositions of which the argument consists, the Unconditioned must be represented as positive and not negative. . . . Clearly, then, the very demonstration that a *definite* consciousness of the Absolute is impossible to us, unavoidably presupposes an *indefinite* consciousness of it." Suppose that, with intent to demonstrate our inability to conceive intersecting parallel lines, we argue that the intersection of parallel lines is a contradiction in terms—that their intersection conflicts with their parallelism; their parallelism, with their intersection. If Mr. Spencer's principles are to be relied on, we have proved the reality of parallel lines which intersect. Strike out everything that stands for the subject of discussion; in its place write "an unreality;" and see if the argument does not lose its intelligibility. By like reasoning, every proof that something is inconceivable is a proof that it exists. The indefinite consciousness which Mr. Spencer remarks is not consciousness of that of which the conceivability is denied; but the construing of several predicates without the power of affirming them of a single subject. Inasmuch as there is a certain bond of union among them, they may be dealt with as an integer; in as much as they exclude each other, the union is incomplete. The denial of conceivability does not exclude all predicates from the mind, but merely the co-affirmation of some of them. While they dis-

place one another, there persists a sense of their kinship, and thus is formed the indefinite consciousness in question. This vague and protean mode may be contemplated in one relation and another, in this aspect and in that; but it cannot be said to represent any reality, since it is marked by absence of the very peculiarity essential to the supposed reality,—that is, the *union* of certain attributes. The indefinite consciousness which arises on mention of the name “Unconditioned,” is no more the consciousness of a reality than that which responds to the mention of equidistant-crossing lines, or any other absurdity.

§ 43. A second attempt to show that we have some consciousness of “The Unconditioned,” follows the one just examined.

“It is a doctrine called in question by none,” premises the author, “that such antinomies of thought as Whole and Part, Equal and Unequal, Singular and Plural, are necessarily conceived as correlatives: the conception of a part is impossible without the conception of a whole; there can be no idea of equality without one of inequality. And it is admitted that in the same manner, the Relative is itself conceivable as such, only by opposition to the Irrelative or Absolute.” (First Prin., § 26.) To carry on the argument to its conclusion, it was necessary to refute a doctrine expressed by Sir William Hamilton as follows. “Correlatives certainly suggest each other, but correlatives may, or may not, be equally real and positive. In thought contradictories necessarily imply each other, for the knowledge of contradictories is one. But the reality of one contradictory, so far from guaranteeing the reality of the other, is nothing else than its negation.” Accordingly Mr. Spencer attempts the refutation. “In such correlatives as Equal and Unequal, it is obvious enough that the negative concept contains something besides the negation of the positive one; for the things of which equality is denied are not abolished from consciousness by the denial. And the fact overlooked by Sir William Hamilton, is, that the like holds even with those correlatives of which the negative is inconceivable, in the strict sense of the word. Take for example the Limited and the

Unlimited. Our notion of the Limited is composed, firstly of a consciousness of some kind of being, and secondly of a consciousness of the limits under which it is known. In the antithetical notion of the Unlimited, the consciousness of limits is abolished; but not the consciousness of some kind of being. It is quite true that in the absence of conceived limits, this consciousness ceases to be a concept properly so called; but it is none the less true that it remains as a mode of consciousness. If, in such cases, the negative contradictory were, as alleged '*nothing else*' than the negation of the other, and therefore a mere nonentity, then it would clearly follow that negative contradictories could be used interchangeably: the Unlimited might be thought of as antithetical to the Divisible; and the Indivisible as antithetical to the Limited. While the fact that they cannot be so used, proves that in consciousness the Unlimited and the Indivisible are qualitatively distinct, and therefore positive or real; since distinction cannot exist between nothings. The error, (very naturally fallen into by philosophers intent on demonstrating the limits and conditions of consciousness,) consists in assuming that consciousness contains *nothing but* limits and conditions; to the entire neglect of that which is limited and conditioned. It is forgotten that there is something which alike forms the raw material of definite thought and remains after the definiteness which thinking gave to it has been destroyed. Now all this applies by change of terms to the last and highest of these antinomies—that between the Relative and the Non-Relative."

I think, nevertheless, that there are unanswerable reasons for siding with Sir William Hamilton. Contradictories may, or *may not* be equally real and positive. In the instances which Mr. Spencer has cited, they are; in an infinite majority of instances which might be cited, they are not. For our examples we shall take such antinomies as Extent which is infinitely divisible, and Extent which is not infinitely divisible; Motion which is communicated gradually, and Motion which is communicated suddenly; Force, operating through a medium, and Force operating through no medium. Or if these are not sufficient, we will mention Mental Effects which are caused, and Mental

Effects which are uncaused; Phenomena of which we are conscious, and Phenomena of which we are unconscious; Appearances known as internal to consciousness, and Appearances known as external to consciousness. Will Mr. Spencer admit that both terms of each of these contradictions are true? Nay, is he ready to embrace the conclusion that the consciousness of every possibility, to which there is a correlative impossibility, carries with it a consciousness of the latter which proves its reality? Absurd though it is, he comes near expressly affirming this very conclusion. Speaking of the correlatives Equal and Unequal, he says that "the things of which equality is denied are not abolished from consciousness by the denial;" and follows this remark with the assertion that "the like holds even with those correlatives of which the negative is inconceivable, in the strict sense of the word." If Mr. Spencer will say that it holds with all of them, and that therefore their contraries are as real as they, it will be unnecessary to make further comment. He would say nothing so self-evidently ridiculous; hence we may argue that "The Unconditioned's" being a correlative does not imply a consciousness of it. We demand some other datum.

It has been given. The Unlimited cannot be thought of as antithetical to the Divisible; whence it is inferred that there is a mode of consciousness answering to something unlimited. We should have been pleased to have Mr. Spencer tell us this when the subject was unlimited Space and unlimited Time. Though they are not interchangeable, he struggled hard to convince us that our thoughts of them in no manner correspond to realities. We shall not be as inconsistent as he,—we will not say one word to prove that there is no positive consciousness of the Unlimited. That we can prove there is such consciousness, by a method satisfactory to Mr. Spencer, is a matter of congratulation. Our present concern is with that which exists out of relation. This, we maintain, we are not conscious of. The argument opposed to us is substantially this: the Irrelative is antithetical to the Relative, and to no other correlative; but if it were not positively thought of, it would be as much antithetical

to one thing as to another; therefore there is consciousness of the Irrelative. An analogous case will furnish complete refutation. To portions of matter which are not co-extensive, there is the verbally intelligible correlative,—portions of matter which are co-extensive. Try to make this correlative seem the antithetical correlative of two twos which do not make five. The effort must be unavailing, because portions of matter occupying the same space and two twos which make five are more to consciousness than zeros; proving a genuine consciousness of them both, or proving Mr. Spencer's mode of reasoning unreliable.

His aberration is undoubtedly attributable to a misunderstanding of the *indefinite consciousness* which is, so to speak, the symbol of the inconceivable. If he had reflected that in different cases it consists of different groups of incompatible affirmations, he would not have thought that if it has various forms, it must, in each of them be a consciousness of a reality. The same reflection might have saved him from a gross inconsistency. He describes consciousness of the Absolute as "something which alike forms the raw material of definite thought and remains after the definiteness which thinking gave to it has been destroyed;" and, further on, speaks of the impossibility of giving "to this consciousness any qualitative or quantitative expression whatever." This can scarcely be thought to consist with the argument that consciousness of the Absolute and consciousness of other correlatives "are qualitatively distinct, and therefore positive or real." Being distinguishable, they are qualified; or being unqualified, they are indistinguishable, and therefore interchangeable. The former position is preferable. In support of it, we have Mr. Spencer's proof that inconceivable correlatives are distinct from one another. In further support of it, we have the fact that the "raw material" of thought would not support the antithesis which exists between the Absolute and the Relative. What has no qualities cannot support the antithesis issuing from the quality of being out of relation. There is no escape from the conclusion, once urged by Mr. Spencer, that the indefinite consciousness which is antithetical

to consciousness of the Related, is more than unmodified material of definite thought. As before explained, it is a collection of definite materials, but incapable of proper combination. The impossibility of constructing from its components a congruous idea, is its mark of spuriousness. It will not avail Mr. Spencer to reject this explanation; for consciousness of the Unrelated, being distinguished from other consciousness, is not unconditioned consciousness—is much less consciousness of “The Unconditioned.”

§ 44. A third endeavor to prove that we have consciousness of “The Unconditioned” remains.

“Still more manifest will this truth become when it is observed that our conception of the Relative itself disappears, if our conception of the Absolute is a pure negation. It is admitted, or rather it is contended, by the writers I have quoted above, that contradictories can be known only in relation to each other—that Equality, for instance, is unthinkable apart from its correlative, Inequality; and that thus the Relative can itself be conceived only by opposition to the Non-relative. It is also admitted, or rather contended, that the consciousness of a relation implies a consciousness of both the related members.” “If the Non-relative or Absolute, is present in thought only as a mere negation, then the relation between it and the Relative becomes unthinkable, because one of the terms of the relation is absent from consciousness. And if this relation is unthinkable, then is the Relative itself unthinkable, for want of its antithesis: whence results the disappearance of all thought whatever.” (First Prin., § 26.)

Before us is an attack upon consciousness of the Related which, it is supposed, may be repelled only by asserting consciousness of the Unrelated. Many other ways of accomplishing the defence are available.

Were nothing necessary to make the Relative thinkable, but to find it an antithesis, there would be no occasion to call in the Absolute. To something related, anything differently related is antithetical. That which exists in certain relations is

sufficiently contrasted with that which exists out of these relations, though it exist in others. For the sum of things related there is a similar antithesis. It is related differently from its components, and they from it. But Mr. Spencer's demands are not to be so easily appeased. He must have the strongest antithesis verbally expressible. Nothing but absolute contradiction is enough for him. As the Relative is a sphere of reality sustaining relations, he will not grant that anything is so strongly contrasted with it as to exhibit its relationship, except a sphere of reality sustaining no relation.

With equal propriety, might we claim that Extended Space is inconceivable apart from the consciousness of Unextended Space. With equal propriety, indeed, might we claim that nothing having a contradictory can be known unless in connection with consciousness of the latter. What knowledge is there that would not be swept away by the requirement? Grant us a license to use his mode of reasoning, and we will substantiate a set of conclusions still less agreeable to Mr. Spencer. How easy, for instance, to prove that the External Universe is self-existent. Other things are known as not self-existent; but that which is not self-existent cannot be known independent of a consciousness of that which is self-existent; therefore we are conscious of something self-existent. How easy to prove, in the next breath, that the External Universe is self-created. This last proposition manifestly conflicts with its predecessor. It also conflicts with the doctrine that the External Universe is unrelated; for, as self-creation can only be in time, the self-created must sustain temporal relations. Causal relations are likewise to be predicated of it. Sufficiently refuted is the argument by its reduction to absurdity. Next comes the exposure of an inconsistency.

While the subject of the relations of the Unrelated is before us, let it be noted, that the passage last quoted proclaims that the Absolute is related, and known as related. Something having no relation, bears a relation of contrariety to something that has relations. Mr. Spencer argues that the something which is related, cannot be known out of relation to the some-

thing which is not related; and that their relation is unthinkable unless both its terms are present in thought. Both terms being present in thought, the Unrelated is known as a term of a relation. The explanation that the Irrelative is present merely as raw material of thought, is entirely unsatisfactory. However symbolized, the Irrelative is symbolized as related, so far as it is symbolized at all. By Mr. Spencer's admission, the raw material and its relations, stand for the Irrelative and its relations. Could anything be more remarkable than the position, that "The Unconditioned" is known, and is, so far as it is known, known as conditioned? If the imagined correlative of the Related, is itself related, what is there antithetical to the quality of relativeness?

Towards finding the required antithesis, we can do more than Mr. Spencer. Here again must be introduced the correction, that the thought corresponding to the word "Unrelated" is far more than unmodified thought. The predications which it contains, although incapable of complete union, present much that is positive. Their union itself, far as it must stop short of completion, is not entirely negative. Such being the case, it is legitimate for us to claim that the thought of the Unrelated, spurious though it is, is more strongly antithetical than any other mental mode, to the thought of the Related. Something very nearly meeting Mr. Spencer's requirement may, it seems, thus be pointed out without prejudice to ourselves. Hence they may, who choose, speak of the antithesis between the Relative and the Irrelative, with immunity from the charge of asserting the latter's existence.

Finding an antithesis for the Relative is to some extent a work of supererogation. I think that philosophers are prone to assign too much prominence to certain relations. Being conditions of the object, these relations are mistaken for conditions of the subject, because they modify cognition. Being general, they are deemed universal. Being auxiliary to comprehension, they are regarded as essential to it. That "contradictories can be known only in relation to each other," is not a deduction from any knowledge in our possession, and multiplicity of facts

prevents its being anything like a complete induction. Nor is it unopposed by facts. Experience is rarely, very rarely, appealed to in order to decide the point in dispute, because, among other reasons, of the difficulty of obtaining and interpreting the answer. Whenever an appeal is made, instances are chosen which are most favorable to the appellant. Thus it is that the majority of instances are never subjected to the slightest examination. Those selected are, moreover, seldom, if ever, examined to ascertain whether the things which occur together are dependent or merely concomitant. Contraries, instead of being simultaneously recognized usually only suggest each other. Some do not even do this. When we read of the quiet path, the green grass, the running brook, we find something which the mind would ordinarily grasp without a thought of contradiction.

The conception which has been defended is of the Relative *as such*. Perhaps it may be better to describe it as still less comprehensive. It is of the Relative in the extreme sense in which the latter is said to be the correlative of the Unrelated. It might consequently have been given up without parting with any attribute of the Relative, but its contrast with the Irrelative. The Related as the antithesis of the Unrelated, in the latter's absence from the universe, we do not need to know.

§ 45. Mr. Spencer has more to say about consciousness of "The Unconditioned," but by way of description rather than substantiation. What he sometimes considers the character of such consciousness to be, may be gathered from the following.

"One of the arguments used to prove the relativity of our knowledge, is that we cannot conceive Space or Time as either limited or unlimited. It is pointed out that when we imagine a limit, there simultaneously arises the consciousness of a space or time existing beyond the limit. This remoter space or time, though not contemplated as definite, is yet contemplated as real. Though we do not form of it a conception proper, since we do not bring it within bounds, there is yet in our minds the unshaped material of a conception. Similarly with our conscious-

ness of Cause. We are no more able to form a circumscribed idea of Cause than of Space or Time; and we are consequently obliged to think of the Cause which transcends the limits of our thought as positive though indefinite. Just in the same manner that on conceiving any bounded space, there arises a nascent consciousness of a space outside the bounds; so when we think of any definite cause, there arises a nascent consciousness of a cause behind it: and in the one case as in the other, this nascent consciousness is in substance like that which suggests it, though without form. The momentum of thought inevitably carries us beyond conditioned existence to unconditioned existence; and this ever persists in us as the body of a thought to which we can give no shape." (First Prin., § 26.)

The analogy which Mr. Spencer uses is one exceedingly hostile to his purpose. From the very peculiarities of the conceptions of Space and Time which renders them analogous to the conception of Causation, was drawn support for the conclusion that they do not represent anything outside of consciousness. Suppose the same rule be applied to the conception described as consciousness of the External Cause. It will then result, if the rule be valid, that this conception corresponds to no reality—is no consciousness of "The Unconditioned." An alternative stricture will suit us better. Conception of the Cause being held to answer, as far as it goes, to reality, the author is unable to resist the conviction that the same is true of the conceptions of Space and Time.

It is granted that there is a conception which Mr. Spencer very well describes. But he describes it as more than raw material of thought, which is what he has told us consciousness of "The Unconditioned" is. Consciousness of a cause, as such, is not unmodified consciousness. Again; he has told us that we are conscious of "The Unconditioned" as antithetical to the Relative in being Non-relative. What now does he mean by saying that we are conscious of "The Unconditioned" as a cause?—that is, as bearing relations of causation?

According to the author's last account, the consciousness of an unconditioned cause follows from the consciousness of

conditioned causes. Does he contemplate these causes as phenomena? If he does, his argument is that if we retrace their lineage we shall arrive at unconditioned phenomena. This is evidently not what he wishes to establish. An unconditioned noumenon is to be the ultimate object of contemplation. Consciousness of "The Unconditioned," not merely unconditioned consciousness, is to be the ultimum. To direct Mr. Spencer's argument against his opponents and not against himself, it is necessary to understand the proximate "definite cause," of which he speaks, to be something external to consciousness. Yet by doing this we do not help him. If the supposed consciousness of the first definite cause is a pseudo-consciousness, the consciousness derived from it—the consciousness of "The Unconditioned"—is probably the same. Supposing, on the other hand, the latter consciousness genuine, is an implied concession that it is possible to conceive the proximate end of the chain of noumenal causation. Effects wrought on consciousness are, then, not all that we know. We know causes; even causes external to consciousness. "The Unconditioned" is not all beyond consciousness: only a remote portion of it. There are many Realists who hold this view.

As Mr. Spencer observes, the conception of a definite cause raises a "nascent consciousness of a cause beyond it." His mistake is in supposing that the remote cause is as unshapen as our conception of it. The constant observation of causes becoming more definitely known, should be sufficient to teach that the modifications of consciousness are usually less numerous and less marked than its object. Though equally absurd, there is a vast difference between unconditioned consciousness and consciousness of something unconditioned. Conceptions like the one in question are so common that we need not look far for an analogy. One thinking of the line of his ancestors, can picture definitely his father's appearance. His grandfather's appearance he is unable to represent with so much definiteness. Of his great-grandfather, and an endless line of predecessors, he can probably call to mind neither form nor feature. Shall he then say that he can trace his pedigree back

to ancestors devoid of form and feature? To do so, is no more preposterous than to declare that tracing back the chain of causation brings us to a cause without form, because its representation is so far from completely formed.

"When we think of any definite cause there arises a nascent consciousness of a cause behind it," says Mr. Spencer. This is true of those causes which are most likely to come to mind on mention of the name; but is far from being universally true. Space is a cause; yet we think of no cause, other than its former self, back of it. The same is true of Time and of the essence of both Substance and Activity. For nothing, but evanescent modes of Substance and Activity, and evanescent spacial and temporal relations, do we seek causes that are not quite as definitely conceived as their effects, being identical with them. The External Cause, we see, does not appear half so indefinite when we cease to contemplate exclusively its indefinite modes. Its vaguest forms, we may add, are presented with some definiteness. Very remote causes, which Mr. Spencer thinks must be regarded without any definiteness whatever, may be, and in fact are, looked upon as some Activity of Substance taking place somewhere in Space and Time. The "momentum of thought" can never carry us into the presence of what is less than this.

§ 46. Still another description of consciousness of "The Unconditioned" is given by the author. Very pertinently he asks: "How can there possibly be constituted a consciousness of the unformed and unlimited, when, by its very nature, consciousness is possible only under forms and limits? If every consciousness of existence is a consciousness of existence as conditioned, then how, after the negation of conditions, can there be any residuum?" And he answers—

"Such consciousness is not, and cannot be, constituted by any single mental act; but is the product of many mental acts. In each concept there is an element which persists. It is alike impossible for this element to be absent from consciousness, and for it to be present in consciousness alone: either alternative

involves unconsciousness—the one from the want of the substance; the other from the want of the form. But the persistence of this element under successive conditions, *necessitates* a sense of it as distinguished from the conditions, and independent of them. The sense of a something that is conditioned in every thought, cannot be got rid of, because the something cannot be got rid of. How then must the sense of this something be constituted? Evidently by combining successive concepts deprived of their limits and conditions. . . . By fusing a series of states of consciousness, in each of which, as it arises the limitations and conditions are abolished, there is produced a consciousness of something unconditioned.

To speak more rigorously:—this consciousness is not the abstract of any one group of thoughts, ideas or conceptions; but it is the abstract of *all* thoughts, ideas or conceptions. That which is common to them all, and cannot be got rid of, is what we predicate by the word *existence*. Dissociated as this becomes from each of its modes by the perpetual change of those modes, it remains as an indefinite consciousness of something constant under all modes—of being apart from its appearances.” “Our consciousness of the unconditioned being literally the unconditioned consciousness, or raw material of thought to which in thinking we give definite forms, it follows that an ever-present sense of real existence is the very basis of our intelligence. As we can in successive mental acts get rid of all particular conditions, and replace them by others, but cannot get rid of that undifferentiated substance of consciousness which is conditioned anew in every thought; there ever remains with us a sense of that which exists persistently and independently of conditions.” (First Prin., § 26.)

Mr. Spencer has the power of bestowing on error a force of expression which few men can give to the truth. “Raw material of thought” would be an admirable phrase, were there anything answering to it; but there is not, at least in Mr. Spencer’s sense. There is no consciousness, or material of consciousness, without form, any more than there is raw material of any thing else, without form. Consciousness devoid of

form, would be consciousness of nothing. Marvelous is it that a sense of existence should be mistaken for unconditioned consciousness. Existence has its modifications, its attributes. It has the attribute of being; it is distinguishable from what is not existence; it is some particular existence; it is known in the cognitive relation. Demonstrably, then, consciousness of existence is, after all, consciousness of the Conditioned, and not consciousness of "The Unconditioned."

Although Mr. Spencer calls consciousness of "The Unconditioned" a "sense of real existence," he, in another place, calls it "a sense of that which exists persistently and independently of conditions." By what right he treats these descriptions as equivalent is not disclosed. They are so far from equivalent as to be conflicting. The latter is more comprehensive than the former. Which will he retain? Consideration reveals little preference. Recently it has appeared that a sense of *existence* is not consciousness of anything unconditioned. The same remark will apply, even more extensively, to a sense of *that which exists* thus and so: The existence of "that which exists" as described, is conditioned; and, moreover, so is whatever is presented besides existence. This last is conditioned in being related to the subject, in being joined to existence, in differing from existence, in differing from other things existing. Strive as we may, we can be conscious of the Conditioned only. Both descriptions of consciousness of "The Unconditioned," represent it as consciousness of something conditioned. In respect of their other absurdities they are about equal. A sense of existence merely (supposing it possible) is a sense of the existence of nothing in particular. There is no possibility of determining to what the existence belongs—no way of knowing it to be the existence, not of this or that which is conditioned, but of something else which is unconditioned. Unless its existence be all there is of "The Unconditioned," we have, then, no consciousness of anything unconditioned. If it be, however, all of "The Unconditioned" is within the grasp of thought. Sincerely as he would repudiate it, this very absurd proposition, that "The Unconditioned" comprises nothing but

existence, seems implied in the author's reasoning. He calls "The Unconditioned" "the unformed;" thereby implying that it is an existence having no attribute except existence. Indeed he is obliged to think it unformed, if he would believe it unconditioned; for that which has modifications is conditioned. Thus it appears that he is driven to the admission, that in knowing "The Unconditioned" as a pure existence, we know it all.

We shall find an equivalent objection to the description of consciousness of "The Unconditioned" as "a sense of that which exists persistently and independently of conditions." This affirms something besides existence, it is true; but it affirms as well a knowledge of the something additional. Such affirmation is a direct denial of the author's doctrine, that nothing noumenal but existence is knowable. There is a way of avoiding this difficulty. It is by returning to the preceding one. Mr. Spencer might explain, that in speaking of "that which exists persistently and independently of conditions," he had reference to something which *is* unmodified existence. Existence may, of course; be alluded to as something which exists. Using this explanation is a return to the position, that the entire "Unconditioned" is within our knowledge.

Whatever attributes it may enable us to contemplate, consciousness of "The Unconditioned" is said to be an abstraction. "In each concept there is an element which persists," and "the persistence of this element under successive conditions, *necessitates* a sense of it as distinguished from the conditions, and independent of them." Has not Mr. Spencer fallen into the error of supposing that because elements can be separately named, and separately contemplated, they can be disconnected in fact? The notion of hardness in the abstract is not constituted by a single mental act. By attending to the hardness of a number of objects of various shapes, there is formed a notion of hardness as distinguished from shape, and independent of any particular shape. Following the example set us, we might assert a consciousness of something hard but shapeless. To do this would be absurd. So also is it to say that because an element is uniform under all conditions, it is inde-

pendent of condition. One important peculiarity of the universal element is that in the concrete it is invariably subject to some conditions. In the abstraction, therefore, this peculiarity should find expression. Mr. Spencer takes into his abstraction an element (existence) fitted for his use, but leaves out an equally persistent element (conditionality) which will not conform to his necessity. When this element has found due recognition, it will be perceived that the sense of general existence is a sense of it as conditioned.

Now another consideration is equally important. Having formed the notion of existence, it is obligatory upon us to consider how far the notion corresponds to reality, reality to the notion. In other cases, we do not imagine that there is an entity answering to the concept. The most that we do imagine is that there are attributes which the concept connotes. A proposal to consider these attributes as composing a separate existence, instead of belonging to the concrete things from which they were theoretically taken, would in other cases be disposed of by a summary exercise of the prerogative to smile.

Mr. Spencer's anomaly of abstraction will be only prejudiced by further illumination. What we contemplate in perceptions and conceptions are, he thinks, phenomena. The element, then, which is recognized as common to them all must, we should think, be phenomenal. But according to his account, we abstract its existence from each, and, when we have fused the abstractions, we have a notion of the existence of something lying back of all, back of even their existence.

§ 47. All advanced in proof that there exists something unconditioned has been noticed, and its inadequacy, it is hoped, made sufficiently manifest. That it may not be thought that the arguments examined are remediable or capable of efficient substitution, a few words more are necessary.

Mr. Spencer's method of proving the existence of "The Unconditioned" is to prove consciousness of it. Such consciousness as he alleged, observe, is not in strictness consciousness of the object; but is no more, though it may be less, than an

idea of the object. Proof of immediate knowledge of a thing is proof that it exists; but proof that an idea of it exists does not remove all doubt of its existence. It is not enough that the idea is necessarily formed, unless the necessity is of a peculiar kind. The necessity of forming an abstraction does not, as we have lately seen, bespeak an abstract entity, but rather favors the reverse. The necessity of forming vague ideas of remote causes does not vouch for the existence of causes that are as vague as their symbols. Inability to think of a conceived existence without thinking of its correlative, does not, if real, evidence the actuality, but only the thinkability, of this correlative. If it be true that arguments to prove the inconceivability of an alleged existence become meaningless if all thought of this existence be suppressed, it may nevertheless be true that to the thought there is nothing corresponding. There are many ideas which we cannot but form, but upon which we cannot rely. We demand, besides proof that we are obliged to *conceive* an unconditioned, proof that we are compelled to *believe* that it exists. Neither has been given.

Some reliance on a very strange method of proving a consciousness of "The Unconditioned" is evinced by Mr. Spencer. It is by proving an unconditioned consciousness. One objection is, that unconditioned consciousness cannot disclose that there is something beyond consciousness of which it is the consciousness. Known merely as a state of mind, it cannot be known as a representative state. To know vicariously that it is consciousness of something, is to have some other consciousness of that something. Another objection is, that there is no consciousness which is unconditioned: in no state of mind is there recognized an unmodified element. It could be distinguished only by its peculiarities; and peculiarities are peculiar modifications.

Apropos of the present criticism, are a few words which appear in one of the author's quotations from Mansel: "we can be conscious of an object, as such, only by knowing it to be what it is." Mr. Spencer would have us conscious of "The Unconditioned," as unconditioned; and yet not conscious of the quality of being unconditioned, but only of the quality of

existence. Either we are not conscious of "The Unconditioned" as such (and if we are not, we have no knowledge of its being unconditioned); or we are conscious of the very attribute which is the only one said to be beyond the bounds of knowledge. No matter that the consciousness is called indefinite: if it is so indefinite as not to be a realization of the quality of being unconditioned, it is not the consciousness in question. No matter that there persists in us a sense of something more than we definitely know: unless it is a sense of something as being unconditioned, it is not sufficient. The consciousness is spurious, if it is not consciousness of "The Unconditioned" as it is.

Because he attempted the impossible, Mr. Spencer failed. To reason about *anything*, is to bring it into *relation*. To reason about *it*, is to give it *distinction*. To *reason* about it, is to view it in more than one relation, and therefore to give it *likeness*. The product of Mr. Spencer's speculations is as bad as the process. It is the conclusion that we know something unconditioned. Yet, by implication, this something is related to the subject; and at the same time assimilated to, and contrasted with, other things which are objects.

Would it not be well for philosophers to refrain from the attempt to prove that there exists an unconditioned? Nay; would it not be well for all to repudiate belief in such an entity? The answer has been given and confirmed. Acquiescing in reductions to absurdity of all pretended knowledge of "The Unconditioned," the effort was to carry them still farther. It would be easy to protract the criticism but to no purpose; for, to those who can adopt a myriad of absurdities, absurdity is a recommendation. Whoever decides in accordance with the best evidence procurable, will decide against the existence of anything unconditioned. I think that even Mr. Spencer would deny that External Reality is any such thing, if his reasonings in regard to it would permit. They will not, however. If a thing is not in every particular infinite, the necessity of contemplating it as not in every particular infinite, does not preclude knowing it as it is. If it is not entirely lacking in relativity, knowing it as related, is not necessarily

knowing it as it is not. If it is not absolutely unmodified, the conditions under which it is presented, or some of them, may belong to itself. Mr. Spencer must maintain belief in something which is in itself unconditioned, accepting its absurdities, or abandon the argument. The alleged incongruities of ultimate religious and ultimate scientific ideas were thought to show the non-existence of objects corresponding. Let the same rule be applied to the belief in "The Unconditioned."

§ 48. Had the existence of "The Unconditioned" been established, Mr. Spencer's argument would still be wanting. No more than assertion has been advanced to show that all outside of consciousness is unconditioned. Consciousness of "The Unconditioned" has not been described as consciousness of "The Unconditioned" as all external to consciousness. It was not considered as consciousness of so much. So much, however, it must be shown to be, in order to complete the argument. The requirement is impossible to meet. Externality is a condition. Aside from this, it is impossible, while ignorant of things, to know that all are this or all are that. The consequence is that the Theistic Realist may affirm consciousness of an unconditioned God, together with a consciousness of certain of his conditioned works; believing both to be external to the mind. A further consequence is that an Atheistic Realist may imagine that he discerns in the external world both qualified material things and an unqualified substratum. Both might affirm with Mr. Spencer the existence of an Unconditioned, and nevertheless maintain, without conflict with his argument, that some noumena are conditioned. In as much as the argument fails to establish that all noumena are unconditioned, it fails to establish that all are unknowable.

CHAPTER IX.

THE DEDUCTIVE ARGUMENTS CONTINUED.

The Nature of Life.

§ 49. There is an important deductive argument yet to be investigated. From his conception of Life, Mr. Spencer deduces, as follows, the unknowableness of things outside of consciousness.

“Divesting this conception of all superfluities, and reducing it to its most abstract shape, we see that Life is definable as the continuous adjustment of internal relations to external relations. And when we so define it, we discover that the physical and the psychical life are equally comprehended by the definition. We perceive that this which we call Intelligence, shows itself when the external relations to which the internal ones are adjusted, begin to be numerous, complex, and remote in time or space; that every advance in Intelligence essentially consists in the establishment of more varied, more complete, and more involved adjustments; and that even the highest achievements of science are resolvable into mental relations of co-existence and sequence, so co-ordinated as exactly to tally with certain relations of co-existence and sequence that occur externally. A caterpillar, wandering at random and at length finding its way on to a plant having a certain odor, begins to eat—has inside of it an organic relation between a particular impression and a particular set of actions, answering to the relation outside of it, between scent and nutriment. The sparrow, guided by the more complex correlation of impression which the color, form, and movements of the caterpillar gave it; and guided also by other correlations which measure the position and distance of the caterpillar; adjusts certain correlated muscular movements in such way as to seize the caterpillar. . . . And

lastly, let it be noted that what we call *truth*, guiding us to successful action and the consequent maintenance of life, is simply the accurate correspondence of subjective to objective relations; while *error*, leading to failure, and therefore towards death, is the absence of such accurate correspondence.

"If, then, Life, in all its manifestations, inclusive of Intelligence in its highest forms, consists in the continuous adjustment of internal relations to external relations, the necessarily relative character of our knowledge becomes obvious. The simplest cognition being the establishment of some connection between subjective states, answering to some connection between objective agencies; and each successively more complex cognition being the establishment of some more involved connection of such states, answering to some more involved connection of such agencies; it is clear that the process, no matter how far it be carried, can never bring within the reach of Intelligence either the states themselves or the agencies themselves. Ascertaining which things occur along with which, and what things follow what, supposing it to be pursued exhaustively, must still leave us with co-existences and sequences only. If every act of knowing is the formation of a relation in consciousness parallel to a relation in the environment, then the relativity of knowledge is self-evident—becomes indeed a truism. Thinking being relationing, no thought can ever express more than relations.

"And here let us not omit to mark how that to which our intelligence is confined, is that with which alone our intelligence is concerned. The knowledge within our reach, is the only knowledge that can be of service to us. This maintenance of a correspondence between internal actions and external actions, which both constitutes our life at each moment and is the means whereby life is continued through subsequent moments, merely requires that the agencies acting upon us shall be known in their co-existences and sequences, and not that they shall be known in themselves. If x and y are two uniformly connected properties in some outer object, while a and b are the effects they produce in our consciousness; and if while

the property x produces in us the indifferent mental state a , the property y produces in us the painful mental state b (answering to a physical injury); then, all that is requisite for our guidance, is, that x being the uniform accompaniment of y externally, a shall be the uniform accompaniment of b internally; so that when by the presence of x , a is produced in consciousness, b , or rather the idea of b , shall follow it and excite the motions by which the effect of y may be escaped. The sole need is that a and b and the relation between them, shall always answer to x and y and the relation between them. It matters nothing to us if a and b are like x and y or not. Could they be exactly identical with them, we should not be one whit the better off; and their total dissimilarity is no disadvantage to us.

"Deep down in the very nature of Life, the relativity of our knowledge is discernible. The analysis of vital actions in general, leads not only to the conclusion that things in themselves cannot be known to us; but also to the conclusion that knowledge of them, were it possible, would be useless." (First Prin., § 25.)

§ 50. Let us be careful to understand the author. Does he mean to say that intellection is the establishment of relations in the mind parallel to relations in "The Unknowable?" He cannot mean this. Throughout those chapters in his *Biology and Psychology* which exhibit Life as correspondence, there is no intimation that the environment, so often mentioned, is other than phenomenal. Indeed his views will not permit such an intimation. Were he to grant that light, heat, air, earth, water, and other elements of a plant's environment are noumena, he could not conceive them save at the expense of his theory of knowledge. Should he concede that any of the multitudinous objects, properties, activities, relations, to which, as he shows us, animal life corresponds, is an extra-mental reality, he would thereby concede to us a knowledge of such a reality. If he will maintain the impossibility of knowing things beyond the mind, he must consider the mind's environment, including the bodily organism, as lying wholly within the

mind's circumference. What, then, is the portent of his definition of intelligence? It must be that every act of intellection is the establishment of relations in one (the subjective) order of mental states, so as to correspond with relations which establish themselves in another (the objective) order of mental states. Such being its interpretation, the definition will not support the deduction Mr. Spencer would make, without an identification which he would not make—an identification of "The Unknowable" with objective appearances. For what is it that cannot be transcended but relations among states belonging to the subjective order of mental affections? This brings the objective order into that relation to the subjective order which "The Unknowable" was to be proved to bear. To retain the objective order as objects of cognition—and, as they are said to lie within consciousness, they must be so retained—it must be admitted that relations among states of the subjective order are transcended by thought. But this again, leaves room for the supposition that "The Unknowable" may be an object of thought. The argument from the nature of life, as we have interpreted it, means nothing, unless objective appearances are (as far as they go) to be identified with "The Unknowable."

It seems that unless we adopt the interpretation which at first we rejected, Mr. Spencer's reasoning must appear unintelligible. We will do so. We will suppose that he means to define intellectual life as the establishment of mental relations correspondent to the relations of things in themselves. The definition before us is not the one which he has in so many places taken so much pains to establish. Declaring, arguing, reiterating, again and again, that life, including mind, is correspondence, he has not advanced one word to prove that mental activity corresponds to more than mental affectability. Wisely so, it would seem on inquiring what could be said to the purpose. Induction can bear no testimony while experience of things in themselves is denied. Deduction is equally mute, unless the nature of things out of consciousness be drawn into the reasoning process. What brings us intelligence that "The Unknowable" is not an entirely homogeneous and inert entity,

by acting upon which in various ways, the mind induces, as reactions, what are called "The Unknowable's" effects? If unmodified, external reality is homogeneous. If homogeneous, it is inert; for activity, being different from its substance, is inconsistent with absolute homogeneity. To illustrate: when percipient of hardness, none can readily decide whether he perceives the force of something external acting upon the mind, or the mind's activity reflected back upon itself. We have reached a conception of mental activity which, besides not being fitted for Mr. Spencer's deduction, supports, as we shall see, an opposite one. The mind being all that is modified or active; "The Unknowable" being homogeneous and inert; there are no forms or activities belonging to "The Unknowable." One attribute is all there is to know about it: this attribute we know: there is no other to which our activities correspond, but which we do not know. If Mr. Spencer's argument is to be revived, this conception of "The Unknowable" must be abolished, and another established in its stead. Primarily it must be rendered evident that "The Unknowable" is the environment of the mind. This cannot be done without assimilating "The Unknowable" to that mass of appearances, the External World. Here we must take away something of which we have long suffered Mr. Spencer to hold unlawful possession. He has no right to conceive "The Unknowable" as surrounding the mind in the same way that objective things seem to surround it, or, in fact, as surrounding it at all. He has no right to make use of spacial externality, for he denies of it more than apparent existence; nor of temporal externality, for he allows no time to noumena. There is a kind of externality which he may better employ. Love is external to hate; pain, to pleasure; belief, to disbelief: let him think that in something like the same manner, "The Unknowable" is external to the mind. But if he does this, his conception of correspondence will fade from thought. No: he must, as he does, give to "The Unknowable" spacial and temporal externality. This assimilation of the reality beyond consciousness to objective appearances, must necessarily be carried much

further. The alleged correspondence remains to be manifested. It is a correspondence of internal to external activities. But the outward activities cannot be conceived except as activities of some substance, nor except as taking place in space and time. Mr. Spencer's definition of intelligence, then, is realized by picturing, *inter alia*, extra-mental substance acting in time and space. What is this but the abstract of all appearances? The second interpretation, as well as the first, makes Mr. Spencer's argument concern appearances, but nothing else. Any attempt to make it concern something else must be futile so long as the something else is beyond our ken; and, to complete the circle, success would be an assimilation of "The Unknowable" to the known—an identification of "The Unknowable" with objective appearances.

Which of the two interpretations Mr. Spencer would have us put upon his definition, we care not. In his own mind, I think it not unjust to say, there was a confusion of both. He evidently did not remark that it makes a vast difference whether we assert Intelligence to be a mental correspondence with mental affections, or with modifications of the reality outside. Putting phenomena only into the premises, he certainly expected to obtain only noumena in the conclusion. The reason that he and others fail to observe how sophistical is the argument, appears to be that when following it in thought they identify external appearances with the reality which is to be proved unknowable. That doing this should not be perceived to conflict with the conclusion, I cannot explain.

§ 51. For the purpose of further testing Mr. Spencer's reasoning, let us lose sight of the distinction which he has not observed, while we entertain the reflections which are to follow.

Cognizance of things in themselves is, in many cases at least, resolvable into relations in consciousness parallel to relations in the environment. If this is so, Mr. Spencer's definition is as agreeable to our views as to his own. And is it not so? The correspondence asserted between internal and external relations is merely such an adaptation of internal modes to

external influences as is promotive of life. When internal relations are such that external relations preventive of life are counterbalanced, and external relations promotive of life are taken advantage of, the correspondence is said to exist. An internal relation through which an external relation is properly met, either co-operatively or adversely, by internal activity, corresponds to such external relation. Now, the knowledge that a harmless must be followed by a harmful external mode, contains a relation that will prompt an avoidance of the first to escape the baneful effect of the second. The relation between the ideas of the two modes corresponds to the relation between the modes. And this can be none the less true if the ideas are genuine representations. Knowledge of things certainly should lead us to respond to their relations as intelligently as knowledge of merely their effects. We have reason to consider cognitions of things in themselves to be the most valuable links in that chain of internal causation which best answers to the chain of external causation.

Mr. Spencer has said nothing antagonistic to this except that, a knowledge of externalities would be *no more* useful than an acquaintance with nothing more than the co-existences and sequences of their internal correlatives. He does not deny the former kind of comprehension to be at least *as* useful as the latter; which is a fact of some significance. To the assertion that, given the knowledge which he allows, there is no need for the knowledge which he denies, the first reply is, that a converse assertion would put him to proof that possession of absolute knowledge would not obviate the necessity for a large quantity of relative knowledge otherwise invaluable. The second reply is that nature does not usually choose a single course; that among her ways and means there are many supernumeraries. Co-existences and sequences of mental effects are doubtless at one stage of its development all, or nearly all, the data intelligence has by which to guide its conduct in relation to the universe beyond; but this is evidence that Evolution, which is a universal advancement, has brought us into possession of a better guide.

But Mr. Spencer has advanced the dogma that an understanding of the nature of things is not a better guide. Proof before assertion is in order. What proof is possible? None, so long as things in themselves are inscrutable. While, however, no proof is possible, much is demandable. It must be shown that internal to "The Unknowable" the same antecedents are followed by the same consequents, and that the same agencies outside of consciousness always work the same effects within. This is not necessarily true, if "The Unknowable" be unconditioned, or if it be absolutely unrestricted in potentiality.

With proof in regard to externalities, there must come proof in regard to internalities. It must be shown that conceptions built of co-existences and sequences form as good symbols as would true ideas of things. I think this cannot be shown because the contrary is true. The representation of a thing as it is, would enable us to lay aside many of its relations to other things; whereas, in as far as ideas deviate from genuineness, they are involved with relations which, being numerous, are cumbersome. Qualities of things are relatively simple in comparison with their important co-existences and sequences. Symbols which are easiest to frame, which can co-exist in the mind in the greatest number and diversity, which are most readily separated and combined, are the best. They render truth obtainable by shortest process, and they bring within our reach truth which, but for their perfection, would be inaccessible. But waiving the question of superiority, symbols resembling things are, if we have the capacity for constructing them, capable of being developed by fewer experiences than symbols not resembling things. The difference is between a mere construction, on the one hand, and, on the other, preparing the materials and doing the work. How well is this exemplified in the case of our fellow beings. If I had no true realization of another's emotions, but depended upon their sensible manifestations for my knowledge of how to act in relation to them, more experience than I could ever have would be required to keep me out of errors which I constantly avoid. That a word should produce a blow, would be an inexplicable

mystery to me. Experiences sufficient to teach me so little as an understanding of what words are likely to call forth blows, would be so multitudinous as to overwhelm any mind with confusion. It cannot be improbable that in other cases similarities, and capabilities of similarity, between internalities and externalities, greatly advance the development of symbols. Improbable or not, likeness of thoughts to things would be a blessing; its impossibility, a curse: and this is the reverse of what Mr. Spencer is secondarily called upon to prove.

To proof he must add disproof. Some troublesome facts are for him to explain away. He should not be unmindful that mankind is, and long has been, struggling to comprehend the great Noumenon. In the effort we recognize a kind of life. This should correspond with Life's conditions, and, if to be ultimately successful, certainly does so. Success would make an end of unsuccessful effort; which is the benefit Mr. Spencer is striving to confer. It would do far more. Though fruitless effort may develop, fruitful effort develops most. Perpetual defeat would drive noble minds disheartened from the field of speculation; slight success would encourage them to try new conquests. There is exultation in propitious search for truth; and, could it ever exhaust reality, it would leave us with a valuable acquisition. "Man shall not live by bread alone." Mental food exhilarates the mind, prolonging life. Truth is a possession in which there is a perpetual delight independent of its usefulness, being in strictness a most useful product. It does seem, therefore, that a comprehension of things beyond the *ego* would answer urgent requirements of life.

Were absolute knowledge incapable of being brought under Mr. Spencer's definition of life, and were it entirely a superfluity, it might still be classed with a kind of life to which the definition does not extend. Life varies from correspondence so far as to be in some cases absolute non-correspondence. No one can deny this who recognizes an effort to grasp the external, and endeavors to dissuade us from it. Numerous other illustrations might be mentioned. The struggles of one assailed, to

evade the assassin's steel, are no more a part of life than are the movements by which a suicide severs his jugular vein. Since, therefore, life presents all degrees from correspondence to non-correspondence, it was not imperative to show that absolute knowledge comes within Mr. Spencer's definition of life, or is fitted to respond to life's necessities. Though it be unquestionable that the correspondence promotive of life could be as well, or even better, carried on without absolute knowledge, such knowledge may nevertheless be a kind of intellectual life.

§ 52. Here must be entered an important complaint against the definition of life advanced by the author. The definition is, at best, only proximate. For many purposes it is very available; for our purposes, far too narrow. In life we find correspondence of internal to external relations; but this very assertion implies that we find more. Correspondence of internal relations to relations that are external, involves also an internal correspondence to the connections between these two sets of relations—that is, with the relations *between* externalities and internalities.

A correspondence more important than this kind has been slighted. I mean the correspondence of internal relations to internal relations. Is not consciousness itself to be considered when the problem is what will best conduce to its own welfare? Does not correspondence with the same external objects vary according to the nature of the life for whose benefit the correspondence exists? Does not the mind often banish thoughts which tend to disturb it; and otherwise perform operations which have no relevancy to things outside, or, at least, have preponderating relevancy to things within? Supposing that these questions carry satisfactory answers, we pass to a third defect in the definition.

The correspondence which life exhibits, is not merely between relations, but between things. Relations must have terms. If these terms, in some instances, be themselves relations, they still imply ultimate terms which are not relations. All relations take every vestige of their natures from the natures of these ultimate terms. A correspondence, therefore, of relations to relations,

is fundamentally a correspondence of things to things. No doubt can be entertained that Mr. Spencer conceives life to be in reality a correspondence of the latter kind; but he does not always reason in conformity with such view. He admits (Prin. of Biology, § 30) that to say that his definition includes "those structural arrangements which *enable* the organism to adapt its actions to actions in the environment, may perhaps be going too far;" and he must admit that it is going too far to say that the definition includes those forms of consciousness which compose the structure and sustain the relations of thought.

There is a way of avoiding the three faults noticed; namely, by saying that life manifests an effort to correspond with the *conditions* to which it is subject. Then, besides external relations, we include those of which one term is internal, and those of which both terms are internal. Then, besides relations, we include things.

To what purpose the correction is made, will be appreciated if the reader will once more reflect that absolute knowledge of anything would constitute a link in the chain of correspondence to it. Knowledge of connections between external and internal conditions, would facilitate correspondence to such connections; and the like may be said with regard to conditions purely internal. In short: a knowledge of all the conditions, both without and within, to which we are subject, would fall under a proper description of the correspondence of life. Absolute knowledge of the subject proves to be, as well as absolute knowledge of the object, a kind of correspondence well fitted for life's requirements.

To what purpose the correction is made, may be better appreciated by bringing it to bear upon the assertion, that "thinking being relationing, no thought can ever express more than relations." The sounder doctrine is that thinking being relationing of things, expresses things as well as their relations—expresses, besides co-existences and sequences, the things which co-exist with and follow one another. States of mind are known in consciousness. If this is not too obvious to require proof, it can be established by adverting to the truism, sometimes

employed by the author, that consciousness of relation implies consciousness of both its terms. But states are things, not relations: if expressed in consciousness, more than relations are there expressed. Suppose the internal things expressed tell us of external things: then external things are expressed in thought. Knowledge of things, as well as knowledge of relations, would fall properly under a description of life's correspondences.

§ 53. Once more we shall turn to Mr. Spencer's definition to find fault with it. After the corrections which were found necessary, life would be defined as the correspondence of internal conditions to conditions both external and internal. But the definition still calls up a very erroneous conception of life. When we view life, its correspondences are very conspicuous; but we cannot repress the feeling that life essentially consists of more than correspondence. The end of the correspondence is to perpetuate life. How differently it sounds to say that the end of the correspondence is to perpetuate the correspondence. It is not the correspondence which is to be perpetuated. That which is to be perpetuated is some form, some activity, which struggles to persist; the correspondence is only ancillary. What the essence of life is, what in every case distinguishes that mode of existence which forms the beneficiary term of the correspondence, I shall not surmise; but I will remark that among its manifestations are considerable self-preservation, a repugnance to loss of identity by deterioration, a tendency to attain higher forms. In these interests correspondence is employed; to these interests it is subservient. In as far as knowledge of things is not resolvable into correspondence, it may be one of those higher modes of life which it is the function of correspondence to produce and to prolong. As all life is not correspondence, something not correspondence may be a mode of life.

§ 54. So many ways of depriving Mr. Spencer of his deduction have been discovered that a recapitulation will not be amiss. From a definition which expresses nothing but phenomena, the deduction cannot be drawn, because it is to concern

noumena. It cannot be drawn from the natures of noumena, because they are professedly inscrutable. Aside from this fundamental difficulty, are considerations equally conclusive. Absolute knowledge may be brought under the definition supposed to preclude it. Instead of being superfluous, it is indispensable. Had we found it as unlike correspondence as non-correspondence is, there would have been no difficulty in finding modes of life with which to class it. Upon unavoidable correction, we learned that the definition extends to absolute knowledge of the subject as well as the object; and that it covers a knowledge of things no less than relations. Lastly, it appeared that correspondence is not life, but for life—that there is something in life worth preserving besides correspondence; and it was intimated that absolute knowledge might be claimed to fall to some extent under this description.

CHAPTER X.

THE DEDUCTIVE ARGUMENTS CONCLUDED.

The Power of Thought to Transcend Consciousness.

§ 55. How can the mind have cognizance of what lies beyond its confines? is a question which has doubtless at many points presented itself to the reader, awakening in him a suspicion that Mr. Spencer's conclusion must be valid, though his arguments be void. The difficulty of imagining the process by which thought can deal with objects outside of consciousness, often has been, and often will be, the potent reason for rejecting Realism. Of this difficulty Mr. Spencer does not fail to take advantage. The advantage, though indirect, is great. It is advantage issuing from constant suggestion of the difficulty. The difficulty is suggested by mere expression of the nescience theory, and by all the arguments in its behalf; particularly by the deductive arguments, and most particularly by the deductive argument last under consideration. Independent of its suggestiveness, there is little power of conviction in such an argument as the following. "If every act of knowing is the formation of a relation in consciousness parallel to a relation in the environment, then the relativity of knowledge is self-evident—becomes indeed a truism." When this is understood to mean that "thinking being relationing, no thought can ever express more than relations," it is easy to refute by pointing out that, as relations imply terms, terms, no less than relations, are expressed in thought. But there is difficulty in disabusing the mind of the impression which the argument raises, that thought taking place wholly within consciousness, cannot, for this reason, transcend consciousness. To prove this a false impression—to show the possibility of realizing the external, is the object of the present chapter.

§ 56. The mystery seems to be that the thought should express more than the thought contains. By those who propound it as destructive of Realism, it is overlooked that a like mystery is presented in every act of memory or anticipation. What I experienced yesterday, and what I will experience to-morrow, are present in thought, though absent in reality. It is the same with all imagination; it is the same with all conception. Concede that a thought may express more than itself, or believe nothing that you do not find in present consciousness; for only when conscious of a thing, are the thing and the thought the same.

No better than the Realist, can Mr. Spencer escape the problem of how thought can transcend consciousness. He divides states of consciousness into two orders—the subjective order, and the objective order; the latter being what the Realist is said to mistake for things beyond the mind. But observe the implication: knowledge of the objective order, both presentative and representative, belongs to the subjective order—lies outside, we might say *this side*, of the order distinguished as objective. Thought, then, does transcend the consciousness of which it consists, and the question remains—How?

The concession which, in view of these considerations, all must make, amounts to this: that no *a priori* improbability that a fact can be construed in thought, arises from the circumstance that it is external to thought.

§ 57. Catholicity of a belief is much in its favor. It is not everything; it may not always be sufficient; it may sometimes be overcome by contravening circumstances; yet it is much, very much. Our author says that “the convictions entertained by many minds in common are the most likely to have some foundation.” (First Prin., § 1.) What belief is nearer universal than that things external to the mind are cognizable by it? All persons during a considerable portion of life, most throughout life, never think of rejecting it; and, from the actions of inferior animals, it is evident that they possess it too.

Spontaneity, no less than catholicity, is significant. With metaphysicians Mr. Spencer finds great fault, because they rely

more on long chains of reasoning than upon a single link. Very justly he charges them with employing extended ratiocination to abolish intuition. Would that he had avoided their error. Belief in knowledge of things extra-mental is assuredly an intuition. How inferior would have been its claims, if it had been the tardy product of reasoning as elaborate as that which is expected to drive it from our minds. Had it been such, we would have been reminded that the farther a belief varies from a pure intuition the less reliance should be placed upon it. I cannot insist on this as an invariable rule, but only on its applicability to the particular case in which we are now interested. Did Mr. Spencer's reasoning contain contiguous intuitions, it would, as a whole, be no weaker than the weakest; and might, because of convergence, be much stronger. But there is a presumption to the contrary difficult to rebut. In the very extended process of reasoning in question, error may have crept in through misinterpretation of intuitions, through the suppression of intuitions, through the introduction of something not intuitional. Where there were the most errors to be avoided, there is the greatest likelihood that some have been committed. We have witnessed many indications that a host of aberrations would be driven from philosophy, if each of the many judgments forming the basis of Agnosticism should be subjected to as severe a test as that which Mr. Spencer has applied to the single judgment which forms the basis of Realism. A general deficiency must be particularly remarked. What, in his arguments, Mr. Spencer would claim as intuitions, are in many instances exceedingly lacking in spontaneity. It requires an effort of the mind to produce them, instead (as in the case of the conviction they are supposed to exclude) of an unavailing effort to suppress. So much more likely is it that some of them are not intuitions; so much more likely is it that error accompanies them if they are. The product of the process is more lacking in spontaneity than any step of the process itself. Mr. Spencer's arguments, where they produce conviction, do not leave such a powerful belief as the one they are intended to remove. The conditions of the latter being presented, it

wells up in consciousness with a power that is irresistible. The conditions of the former—that is, the fullest realization of Mr. Spencer's arguments—being presented, it comes, when it does come, the ghost of a belief which the mere crowing of a cock will dispel like other phantoms. I will not say that Mr. Spencer even endeavored to raise his peculiar nescience doctrine to the status of an intuition. All that I dwell upon is the probability that he has not done so. But if he has, he has done no more for his cause than nature had already done for ours.

These arguments from catholicity and spontaneity are very important. If they were not so clearly and firmly grasped by the mind as to find concise statement, they would receive more consideration than has been, or is likely to be, devoted to them. Their very strength is the cause of their usual argumentative inefficiency. Mr. Spencer has not given to them that attention which their importance calls for. By drawing a distinction, he thinks to dispose of them. The existence of an external reality he admits we know; more of it than its existence he contends we do not know. The intuition of something external is to be relied on as far as it is an intuition of existence, and no farther. Where is the justification of the distinction? It is not to be found in any want of persistence in the rejected elements of the intuition. As strenuously as "common sense asserts the existence of a reality," does it assert other attributes of the reality—its spacial extension, for instance. It is as easy to banish the reality from the mind, as not to think of it as spacially extended. We can go further towards conceiving impressions as produced within the subject by the subject, than towards conceiving the subject as not surrounded by space. The verdict, or rather the testimony, of common sense is not in favor of Mr. Spencer's views. It decides *that* something exists, and partially *how* it exists. As great as is the weight of its authority, so great is its opposition to Transfigured Realism. Every portion of the verdict is spontaneous and catholic. This consideration is urged, not as one that is decisive, but as one that is very strong.

§ 58. That there is some kind of process by which the mind can take cognizance of more than itself, is clearly asserted by declaring that the existence of something absolutely external is cognizable. When once it is conceded that the mind can look out beyond itself and discern existence, the cry that it is impossible for intelligence to contemplate other qualities, merely because they are external to it, must be hushed. "Thinking being relationing, no thought can ever express more than relations," says the author. How is it with the thought of external existence? If this expresses no more than relation, why call the thought of qualities other than existence illusive, even if it *does* express no more than relation? The fact, however, is that the thought of noumenal existence expresses more than this; for existence is neither a relation nor an aggregate of relations. There is, therefore, no absurdity in the belief that thought expresses other external things which are not resolvable into relations. When Mr. Spencer professed to know that "The Unknowable" exists, he destroyed the argument from its externality.

In light of these remarks, the implications commented on in Chapter II. are seen to have an importance which did not there appear. The whole inductive argument is based on the supposition that things in themselves are congruous. By what power of thought is extra-mental congruity ascertained and realized? Whatever the power it matters not: it is of the kind whose possibility is here contended for. Looking out beyond itself, intelligence sees, besides existence, congruity; and congruity of the external can be realized only by means of some modification of thought which expresses more than the internal.

One deductive argument rests on the postulate that "The Unknowable" is unconditioned. The use of this argument is an assertion in still another form that there is a process by which intelligence brings externalities within its ken; that there is a mode of thought that expresses reality beyond. The mind's ability to look out beyond itself and perceive unconditionality, is, if real, the power of thought to transcend consciousness.

In the attempted deduction from the nature of life, the same intellectual feat is affirmed.

An evidence that "The Unknowable" is unknowable, was thought to be that it is the mind's environment. Looking outward, the mind observes that something lies outside around about it. The process by which it sees so much, is one truly analogous to seeing; one by which intellectual sight is brought to bear upon external things.

That external reality is a universal cause, is a proposition, on the truth of which an important argument depends. The amount of knowledge of the external which this implies is very considerable. Looking beyond the mind, something is perceived to be the cause of all that is external, and of all impressions of externality. Looking back of the mind, the same thing is seen to underlie and support all states of consciousness. Truly, then, the mind is believed to by some process obtain, and by some mode express, more fact than is contained within itself.

Even the belief that noumena are unknowable, is an assertion that mind can contemplate more than mental affections. Viewed in one light, unknowableness is the inability of something to assume such a character that our faculties for knowing can be brought to bear upon it. If we know this of noumena, we know what is not in consciousness.

After what has been said, all of Mr. Spencer's persuasion must allow that intelligence is of such a nature that it can transcend relations in consciousness; for the knowledge which their theory assumes is not confined to such relations. Farewell, then, to the deduction from the nature of life; farewell to any argument from externality.

We must not overlook the most conspicuous and important instance in which the intellect is believed by all to grasp more than the internal. Any one who agrees or disagrees with my views concerning knowledge, does so on the supposition that, in what is to him the environment, are minds essentially like his own. If the fact is otherwise, he may indeed trace the limits of his own intellectual capabilities; but in no case can he, without penetrating his environment, set a limit to the capabilities of other intelligence. It is not to be supposed, however, that any one will be perverse enough to deny that his environment contains minds similar to his own. Mr. Spencer in particular

cannot deny it; for his theory of nescience is a theory concerning all minds, and was published for the instruction of human minds that they might learn their essential impotence. With what credibility, then, comes the assertion that no mind can perform the operation of intellection with respect to aught beyond relations within itself. With less than none; since the assertion implies that the operation has already been performed.

Glad to extend this confutation to all forms of anti-Realism, and not unwilling to give further evidence of Mr. Spencer's conviction that to transcend consciousness is to some extent possible, I cite the following. "Among the many contradictions which anti-Realistic hypotheses involve, is the contradiction between the assertion that consciousness cannot be transcended and the assertion that there exists nothing beyond consciousness. For if we can in no way be aware of anything beyond consciousness, what can suggest either the affirmation or the denial of it? and how can even denial of it be framed in thought? The very proposition that consciousness cannot be transcended admits of being put together only by representing a limit, and consequently implies some kind of consciousness of something beyond the limit." (Prin. of Psy., § 442.)

From all orders of philosophers, it seems, may be wrung the admission, implied when not expressed, that cognizance of externality in some shape or manner is a fact. Whoever makes the admission thereby deprives himself of the argument that there is or may be something which cannot be known, because to know it would be to transcend consciousness.

§ 59. Several separate arguments, ranging from strong to irresistible, converge in the doctrine that knowledge of the mind's environment is not a psychological impossibility. How the mind can, as we say, grasp that which is not contained within itself is still a mystery; but that it does so has been shown to be admitted. By Mr. Spencer the mystery is accepted as a fact, without an explanation. An explanation of the mystery he cannot, therefore, require of us. As, however, it would greatly strengthen Realism, a solution shall be attempted.

§ 60. The Philosophy of The Unknowable presents many aspects. Some are but slightly intimated here and there by Mr. Spencer, and some can scarcely be said to be intimated at all. Each aspect has implications peculiar to itself, which, if definitely wrought out, would terminate in a vindication of Realism. One such aspect is to be here applied to our purpose. Mr. Spencer is favorable to the doctrine, "that it is alike our highest wisdom and our highest duty to regard that through which all things exist as The Unknowable." (First Prin., § 31.) By such expressions, often repeated, he tries to impress on us the propriety of contemplating "The Unknowable" as "the Cause of all things." Suppose we follow his direction. The Cause of all things produced mind. How are we to conceive this? Undoubtedly as Mr. Spencer in fact conceives it: previously there existed an active substance, which occupied space and consumed time; from certain activities of this substance, resulted certain modes called states of mind. The conception is fundamentally like that of Materialism, and that of extreme Spiritualism. Each of the three theories postulates a fundamental something, and regards states of mind as among its modes. From this point there is divergence. These evolved modes Mr. Spencer proposes to consider to be, excepting in respect of the quality of existence, absolutely unlike any other modes of that of which they are modes. There never was a less warranted presumption. At hand there is the means of driving him from it. Not enlarging upon the probabilities of accidental similarity, it is certain that that which is a mode is essentially like anything else which is a mode. The likeness must be still greater where the compared modes are modes of the same thing. There are, therefore, Mr. Spencer being witness, similarities between mind and not-mind.

But this conclusion, from which there is for Mr. Spencer no complete escape, is one that he will not accept. In his work on Psychology (§§ 77-95) he devotes two chapters to the proposition that feelings and the relations between feelings are qualitatively and quantitatively absolutely unlike things and relations between things. Two considerations operate in favor

of a brief attempt at refutation: one, that unlikeness of thoughts to things is not to the majority the equivalent of the latter's unknowableness; the other, that the dissertations to be refuted consist (not improperly) in manifold repetition of the same thing.

Mr. Spencer's proof consists principally in an enumeration of cases in which the same cause produces various effects in consciousness. For example: "The quality and the quantity of the sensation produced by a given amount of a given external force, vary not only with the structure of the organism, specific and individual, as well as the structure of the part affected, but also with the age, the constitutional state, the state of the part as modified by temperature, circulation, and previous use, and even with the relative motion of subject and object." (Prin. of Psy., § 86.)

The fundamental fallacy of this kind of reasoning is, of course, that it posits knowledge of that of which all knowledge is denied. But in this particular case, the knowledge presupposed is that the unknown cause is unlike its effects; which is the proposition to be established, and which cannot be realized unless it be untrue.

The unlikeness which is presupposed is the antithesis between constancy and variability. It is assumed that the cause is constant while the effect varies with subjective conditions; whence it is inferred that the cause and the effect are absolutely unlike. How, it must be asked, may it be ascertained that the cause is the same while the effect is different? In no way, it must be answered, unless there is some manner of learning the constancy of the cause. That he assumes the constancy of the cause, Mr. Spencer admits: "the validity of the argument depends wholly on the existence of the common antecedent as something that has remained unchanged while consciousness has been changing." (Prin. of Psy., § 88.) He can allege no warrant for such assumption; since continuance of existence (all that he professes to know of noumena) is continuance of existence only—not continuance of any particular state. Persistence of the cause does not amount to persistence of any one of its possible modes. He admits that

the cause is capable of activity: "the inference is valid only supposing the activity to which these different sensations are referred, is an *activity out of ourselves* which has not been modified by our own activities." (Prin. Psy., § 88.) Capable of activity, the cause may be supposed to vary with the variations in the effect, unless we know it far enough to be able to decide that it does not. To know so much is as essential as it is fatal to the conclusion sought. What, besides a suicidal begging of the question does it involve?

It will not take us long to learn that it involves abolition of the conclusion. The most general, as well as one of the most persistent, of internal effects of an external cause is the idea of such cause. Our warrant for, and our means of, thinking that the cause is constant is the constancy of an idea. This brings us to a dilemma. If we say that the idea and the thing are similar in respect of constancy, we must reject the conclusion that there is no resemblance between ideas and things. On the other hand, if we say that the idea and the thing bear no resemblance in respect of constancy; then, since the idea of external being is constant, external being is not constant; which deprives us of the grounds on which the conclusion is founded. Were the constancy in question persistence of existence, instead of persistence of modes, this consequence might be escaped; but in such case the conclusion could not be established, since it depends on constancy of state in the cause answering to inconstancy of state in the effect.

Thus we are led back to the starting point. The argument presupposes knowledge that the cause is constant in corresponding respects, and in the same degree, as its effects are inconstant. And when we try to think of the cause as thus proved to be unlike its effects in thought, we find we are proceeding on the assumption that it is like one of the most important of them; that is, our idea of it.

Mr. Spencer's failure to observe that the idea of a cause must be constant in such wise as we think of the cause as constant, introduces to us a second order of fallacies. In no instance which has been cited, or could have been cited, is there any means of determining that the cause has not varied, except

the fact that its effects present some degree, and a considerable degree, of invariability. Take this example: "when the Sun is seen in the midst of the sky, with none but great angular spaces between it and the horizon, it looks very much less than it does when close to the horizon, where the angular space it subtends is comparable side by side with small angular spaces." (Prin. of Psy., § 90.) Nevertheless we decide that the same cause affects us, merely because there is, *on the whole*, a persistence of the same effects. The sun sinks below the horizon and the moon appears: now we may say a different cause affects us, for no other reason than because a set of effects has, on the whole, been altered. It is only by persistence of some effects, of the most important effects, of a cause, that we ascertain the variability of its other effects. Where the effects are entirely different, we assert an entirely different cause. But it is not of relatively uniform effects only that invariability is to be predicated. It is to be in some degree predicated of effects liable to great variations. To run through the whole scale of variations relative to its size, the sun must present successively all sizes, and no size. In so far as it is incapable of so great variation it is constant in size. For purposes of present criticism, Mr. Spencer has named instances perhaps better than the last. "Months to the old man appear no longer than weeks to the young man." (Prin. Psy., § 91.) "Distances which seemed great to the boy seem moderate to the man; and buildings once thought to be imposing in height and mass, dwindle into insignificance." (Prin. Psy., § 90.) But do months and weeks appear to the aged without distinction of length? and have they usurped in thought each other's places? Does the distance from earth to some remote celestial orb, so marvelously great to the boy, seem but a step to the man? Do houses, by acquaintance with larger, lose their height and mass? If these questions are not to be answered affirmatively, and they evidently are not, we find constancy in elements that are variable. A third consideration must be joined to the last two. It cannot be denied, as a matter of fact, that effects, liable to variation do not always vary, and that when

they do vary they do not always vary as extensively as they might. In other words, sensations which sometimes change are sometimes relatively permanent. In this, then, they resemble their causes,—that is, if Mr. Spencer is to be credited. He has, in a very brief and dubious manner, recognized the implication. "Only while all the conditions remain constant," he ventures to say, "is there something like a constant ratio between the physical antecedent and the psychical consequent." (Prin. of Psy., § 78.) Sometimes, then, according to the implied admission, there is likeness between the physical antecedent and the psychical consequent. We are glad of the admission, though it has not been consistently acted upon. Like other thinkers, although perhaps least so, Mr. Spencer sometimes considers the mention of a difficulty as a license for thereafter ignoring it. He, of all, should have the most vivid realization that the very basis of Evolution, and in fact of all science, is the persistence of not only the existence, but the quantities and qualities of phenomena. It is a grave question which really preponderates—the dynamics or the statics of the universe.

By way of summary, it must now be said that in effects which are almost absolutely constant, in effects which are not absolutely without constancy, and in effects which are temporarily constant, we discern in consciousness the possibility of a representative correspondence with what we believe to be without.

That Mr. Spencer is possessed of a remarkable power of heaping before the mind instances favorable to himself, to the entire concealment of all others, is a remark justified by what has just preceded, and well exemplified by what is now to follow. Most of his examples are like the following. "Sensations which to others seem strongly contrasted, as red and green, seem" to some the same. "Vibrations exceeding thirty thousand per second, are inaudible through certain ears; while through other ears that are, as we may suppose, of somewhat unlike structure, these rapid vibrations are known as an excessively acute sound." "The Bushman is impressible by changes in the field of view which do not impress the European."

(Prin. of Psy., § 80.) "A whiff of ammonia coming in contact with the eyes, produces a smart; getting into the nostrils, excites the consciousness we describe as an intolerably strong odor; being condensed on the tongue, generates an acrid taste; while ammonia applied in solution to a tender part of the skin makes it burn, as we say." "The Sun's rays falling on the hand cause a sensation of heat, but no sensation of light; and falling on the retina cause a sensation of light but no sensation of heat." "When drinking a liquid the heat of which is quite bearable by that part of the upper lip usually immersed, it may be observed that if the lip is accidentally dipped deeper, so as to immerse a little of the outer skin, a sensation of scalding results." (Prin. of Psy., § 82.)

Instances like these, following each other in great numbers, are very impressive in fact, while intrinsically they are of little worth. We do not need to be told that Pain and Pleasure are about as unlike their external stimuli as it is possible for anything to be. It would have been more in accord with logical requirement to say less about the sensations of Light and Heat; for they are not supposed to be other than very unlike the agencies by which they are wrought upon the mind. That Color, Odor, Taste, and Sound are respectively less like their causes than they are like each other, all are ready to admit. No one thinks of asserting that for every object, and every distinction of objects, outside of consciousness, there must be a representative phase of consciousness: so variations of sensibility to things and their distinctions is rather irrelevant. The senses of Touch, Taste, Smell and Hearing, being, for purposes of perception, less used and less perfected than Sight, have furnished by far the more examples; whereas, for the same reason, they should have been by far the less discussed. Similarly, secondary qualities have been contemplated almost exclusively; whereas primary qualities are the ones of the most importance.

What is the meaning of Mr. Spencer's bias of selection? Is it not evidence that primary qualities—the qualities with which we have the most frequent communion, are the best construed in thought? We have already seen that

extension is a quality of which he finds it difficult to dispose. Is not his impropriety of choice also evidence that the higher the development of a sense, the more it can reveal of the cause of a sensation? He not only deals with Sight less than the other senses, but, as we have seen, less satisfactorily to himself.

Here must be said, what was not observed before, that while sensations have been the chief objects of consideration, ideas and perceptions more than they, and thoughts more than all these are the subjects of contention. The sensation is the nucleus of the idea, and the idea is the nucleus of an indefinite body of thought which clusters about it. Taking the least advantageous examples, we may argue that although a *sensation* of touch, an odor, a taste, a sound, a color, is dissimilar to its cause, yet the *perception* of which it is a part is to some extent a genuine representation of externality. In illustration, we may say that the constant reference of color to an extended object seems to point to an association in consciousness arising from some association in fact. The argument we may carry further, by maintaining that this, which is true of *perception*, is, in a greater degree, true of *thought* in general. The place which color occupies in the universe of thought, must have some general correspondence with the place its cause occupies in the universe of reality. Again criticism leads us to the conviction that there must be some likeness between the internal and the external worlds.

After the discussion of the last two paragraphs, we are well prepared to advert to a second fallacy lying at the very base of Mr. Spencer's reasoning. Of certain relations he says: "as we cannot fix on any one of these relations in consciousness, rather than any other, as like the reality beyond consciousness, we must infer that there is no likeness between any one of them and the reality beyond consciousness." (Prin. of Psy. § 92.) This mode of reasoning is not confined to relations. Though not throughout expressed, it is throughout implied, that because we cannot fix upon any of a set of subjective effects as like their common cause, we may be assured that no one of them is like it. Because we do not know which object in a room is

most like that which wrought them, no one is most like it, no one is more like it, no one is at all like it. The weakness of such an argument is too great to excuse further comment.

We must return to an assumption which was passed without notice. It is not true that we cannot fix upon one mental impression as more than another like that which makes them. Differences in degrees of persistence in thought signify like differences of degrees of correspondence. Primary qualities are more persistent in thought than secondary ones; impressions through higher sense, more persistent than impressions through lower sense. Notions are more persistent than the experiences which evolve them; and propositions, more persistent than the notions which converge to form them. That which, as a representation, has the most persistence, is doubtless the best representation. We must then presume that if non-persistent representations are unlike things, persistent representations are less so.

Besides this distinction between the least and the most variable modes of representative consciousness, we have to note a distinction between the different states of the latter—of the most variable modes. If these are continually vacillating between wide extremes, they are likely to represent more truly the nearer they approach the mean. Being in the extreme states unlike the represented reality, they should, in the mean state, be less unlike it. This is the state which they are constantly drawn towards; which is merely saying that it is the most persistent.

The force of some of Mr. Spencer's examples is capable of being explained away. This for instance. "Take two objects sufficiently far apart to give standing room between them. Having contemplated their relation of position from a distance, contemplate it afresh, after having so placed the body that one of them is in front and one of them is behind. It will be found that what is conceived as a single relation in the one case cannot be so conceived in the other." (Prin. Psy., § 90.) The change in the contemplation is so very slight that, without much detriment, all that it can be held to imply might be conceded: a fact well illustrating the constancy of visual ideas. But the

concession, if made, would be a pure gratuity. It should not, as it is likely to, be forgotten that, whereas before the objects were the extremes of a simple relation, now they are, as they seem to be, the extremes of a relation whose mean is self. Change in the effect seems, in this case, to answer to change in the cause.

Take another. "The facts that the co-existent positions forming a circle become to perception an ellipse when viewed obliquely, and a straight line when viewed edgeways, illustrate the truth that compound relations of Co-existence undergo a species of qualitative variation as the place of the percipient varies." (Prin. Psy., § 90.) Suppose the facts otherwise. Suppose the hoop, which a child is rolling past, did not appear as it recedes first an ellipse, and at last very like a line, but still continued circular. In such case we should be compelled to decide that what we seem to see is not what we really see: the phenomenon would be a splendid exemplification of Mr. Spencer's views. What is the explanation of the contradiction that has so unexpectedly arisen? In the first place the hoop does not, as Mr. Spencer thinks, "become to perception" anything different from what it was at first: a fact showing how much more stable perceptions are than sensations. Moreover when looking upon a circle obliquely, it is usually perceived to be circular: usually an effort of the mind is required to make it look like an ellipse. Perception makes allowance for deviations of sensation. But the real explanation is that the circle has many aspects. That which affects us when we see the circle is not that which affects us when we see the line. It is for this reason that if it should seem to present a circle when the circular side is turned away, we should be deluded. The growing, and at last complete, coincidence of certain lines, drawn in imagination from the extremities of the object to the point of sensation, is as real as it is apparent. There may be in the phenomenon a liability to delusiveness, just as a stump is liable to be mistaken for a highwayman; but it is not essentially, nor even commonly, delusive. All in all, the example is far more repugnant, than favorable, to the views of Mr. Spencer. They who most accord consequence to relativity to self, are continually

acting on the supposition that it is not a fact but a delusion. We have lately found Mr. Spencer reasoning as though an object should remain absolutely the same to cognition, while its relation thereto undergoes great change. Here is the same error in another form. "Animals having great locomotive powers are not likely to have the same conceptions of given spaces as animals whose locomotive powers are very small. To a creature so constructed that its experiences of the larger spaces around have been gained by long and quick bounds, distances can scarcely present the aspects they do to a creature which traverses them by slow and many steps." (Prin. of Psy., § 90.) In common speech the propriety of this discrepancy of estimation is recognized by such sayings as that a distance which is short to an antelope is long to a snail. It is a fact, as well as an impression, that, though the distance, abstractly viewed, does not vary, its relations to different things are various. A short distance bears very much the same relation to the snail, as a long distance does to the antelope. If a foot should seem longer than a yard to the one, and a yard should seem shorter than a foot to the other, both would be deluded; but as it is, neither is in error.

With this example may be classed another. "A grain and half-a-grain are hardly distinguishable by their pressures on the finger; but if successively borne by an animal not more than a grain in weight, a difference divisible into many degrees would doubtless be perceptible between them. Conversely a man cannot perceive the contrast in weight between a ton and half-a-ton, for he fails to put forth a force sufficient to lift either; but it can scarcely be questioned that in the consciousness of an elephant, now loaded with one and now with the other, the feelings produced would have an unlikeness that might be graduated." (Prin. Psy., § 92.) The explanation is in both cases very simple. Relatively to their strength, there is to a tiny animal more difference between sustaining a grain and half-a-grain than there is to a human creature. It is absolutely true that one puts forth more effort than the other. Similarly, and more obviously, to the unavailing effort of the man, the ton and the half-ton which he tries

to lift bear the same relation, while they bear different relations to the exertions of the elephant. In neither of the cases is the variance a delusion.

Criticism has been necessary to turn the foregoing illustrations against the author; but there are some so manifestly adverse to him that it is difficult to understand how he mistook their tendency. This is one. "A greater chill is felt by those who, instead of standing still, are exposed in a carriage to the 'wind of their own speed.'" (Prin. of Psy., § 84.) I do not know whether it is or is not necessary to point to the fact that, in this instance, the intensity of the effect varies in exact proportion to the varying intensity of the cause. Again we find, as we have so frequently found before, evidence of likeness between extra-mental things and their mental representatives.

It may have occurred to the reader, that Mr. Spencer's error is that of one who adopts an extreme position. Certain it is that had he contented himself with the thesis, that there is a great, instead of an absolute, unlikeness of nature between mind and not-mind, he would not be amenable to most of the criticisms made and to be made. But such moderation of view was not congenial to him; and the consequence is that he has carried his reasonings to an extremity that is surprising. If his obligation to do so had occurred to him, he would probably have tried to show that there is beyond consciousness nothing answering to the abstractions, "things" and "attributes." My reason for thinking this is that he has attempted to do as much in the case of relations. The relations with which he concerns himself are relations of co-existence, relations of sequence, and relations of difference. Of these he questions as follows. "But now what are we to say about the pure relations of Co-existence, of Sequence, and of Difference; considered apart from amounts of Space, of Time, and of Contrast? Can we say that the relation of Co-existence, conceived simply as implying two terms that exist at the same time, but are not specified in their relative positions, has anything answering to it beyond consciousness? Can we say that out of ourselves there is such a thing as Succession, corresponding to the conception we have

of one thing coming after another, without reference to the time between them? And can we say that what we know as Difference, apart from any particular degree of it, has objective unlikeness as its cause?" In answer to these questions, he says: "The reply is that we cannot frame ideas of Co-existence, of Sequence, and of Difference, without there entering into them ideas of quantity. . . . Co-existence cannot be thought of without some amount of space. Sequence cannot be thought of without some interval of time. Difference cannot be thought of without some degree of contrast. Hence what has been said above respecting these relations in their definitely-compound forms, applies to them under those forms which by a fiction, we regard as simple." (Prin. of Psy., § 93.) This allusion, to "what has been said above," has reference to the examples of the variability of the appearances, Space, Time, and Contrast; of which the most important have been examined, with result contrary to what Mr. Spencer is here making the basis of his argument. Space, Time, and Contrast in the concrete are not delusive; but if they were it would not follow that in the abstract they would not be less so. Abstraction, being an exclusion of inconstant elements, and an intensification of those that are constant, should operate as a process of purification. Mr. Spencer felt the necessity of giving further proof of his "apparently-incredible proposition." By a more than questionable process, he comes to the conclusion that "the whole question of the relativity of relations among feelings is reducible to the question of the relativity of the relation of Difference." Then he explains that "the relation of Difference, as present in consciousness, is nothing more than a *change* in consciousness;" and proceeds thus: "How, then, can it resemble, or be in any way akin to, its source beyond consciousness? Here are two colors which we call unlike. As they exist objectively, the two colors are quite independent—there is nothing between them answering to the change which results in us from contemplating first one and then the other. Apart from our consciousness they are not linked as are the two feelings they produce in us. Their relation as we think it,

being nothing else than a change of our state, cannot possibly be parallel to anything between them, when they have both remained unchanged." (Prin. of Psy., § 93.)

So patent is it here, that we can not fail to note an assumption which at once begs the question for our opponent, but decides it in our favor. That "as they exist objectively, the two colors are quite independent;" that "there is nothing between them answering to the change which results in us from contemplating first one and then the other," is an entirely gratuitous assumption. That "apart from our consciousness they are not linked as are the two feelings they produce in us," is the very proposition to be proved.

But proved or assumed, Mr. Spencer has no right to any such proposition: it cannot be construed unless connections out of consciousness can be known through unlike relations in consciousness, or there are in consciousness connections like those beyond. Moreover, what can Mr. Spencer claim to know about things "as they exist objectively"—as they exist "apart from our consciousness"? Unless he will give up the contest, nothing! To him, the two colors can be no more than effects in consciousness.

When thus considered, the fact which has so impressed him, that they are not connected by transition, abolishes his first premise. Here we have a difference in consciousness which does not consist in transition. It may be that primordially it did involve transition, and that the element of transition has not been, and never will be, completely elided; but to the fact that it is not transition, we have Mr. Spencer's testimony.

From our point of view, there is no difficulty in explaining the representation of difference by change. Admitting that consciousness is made up of *changes*, would not be an acknowledgment that there are no such things as *states* of consciousness. What we call a state of consciousness may consist of infinite minute changes, singly without persistence, yet, as a body, persistent. If this be true, a state of consciousness is as much a state as an activity, and may thus represent a state. And if there are in consciousness homogeneous states, may there not be heterogeneous states, states in which difference is statical? If so, but not otherwise, we have

an explanation of the fact that the contrast of contiguous colors does not seem to involve a conscious change. But suppose this explanation wanting. There is, we will say, between the two colors, a spacial difference, and this difference is represented by the change in consciousness which takes place when we pass from the contemplation of the one to the contemplation of the other. Who can fail to see that there is a likeness between the thing and the representation? Does not the change intervene between subjective states as the space does between objective things? Is not the extent of the change determined by the spacial distance for which it stands?

Leaving the reader to answer these questions and such others like them as may arise, I must, in this connection, make one other charge. As is usual, Mr. Spencer has chosen one of the most favorable examples he could find. Why did he not choose a case in which the objective difference accompanies change of one thing from state to state? An apple falling to the ground changes its state; and by following out the change in thought, we realize the difference. This leads to a more general remark. If we had been driven to the conclusion that there can be in consciousness nothing resembling the difference of objective states which are not connected by change, we could have set up the counter proposition that in consciousness are resemblances to difference of objective states which are connected by change.

It remains to be shown that Mr. Spencer is not entirely satisfied with his proof that there are no objective relations answering to relations within the subject, and that he does not long adhere to this conclusion. He manifests a weakening of conviction by saying, that "Concerning compound relations of Sequence, as concerning compound relations of Co-existence, we must say that *probably* they are not qualitatively like the connections to which they answer. . . ." (Prin. of Psy., § 91.) A further step in the same direction is the recognition of "the assumption made throughout, and inevitably made in all reasoning used to prove the relativity of relations, that there exists beyond consciousness, *conditions* of objective manifestation, which are symbolized by *relations* as we conceive them."

(Prin. of Psy., § 95.) The "conditions" which belong to "The Unconditioned" must be things, attributes, relations, or a compound thereof; and, since of plurality, must present difference. The implication comes out more concretely in the following: "The very proposition that what we know as a relation is qualitatively and quantitatively determined by our own nature, and does not resemble any order or nexus beyond consciousness, implies that there *exists* some such order or nexus beyond consciousness; and every step in every argument by which this proposition is established, distinctly posits this order or nexus, and cannot be taken on any other condition." (Prin. of Psy., § 95.) This use of the phrase, "order or nexus," is nothing else than a recalling under one name what had been banished under another. If "order or nexus" means anything, it implies some kind of co-existence or sequence. Any lingering doubt of this will be removed by the following: "There is *some ontological order* whence arises the phenomenal order we know as Space; there is *some ontological order*, whence arises the phenomenal order we know as Time; and there is *some ontological nexus* whence arises the phenomenal relation we know as Difference." (Prin. of Psy., § 95.) This seems to be an admission that, beyond consciousness, there are two orders of something called for ambiguity's sake, a "nexus." As "nexus" may mean anything from a substance to a mere relation, it is impossible to say what it implies, except that it implies as much, at least, as a relation; but "order" is fraught with meaning. Unless, which is not supposable, Mr. Spencer will name a third kind of order as possibly existing out of consciousness, the orders which he has recognized in the objective world must be those of co-existence and sequence. However this may be, the assertion of two objective orders is the assertion of some objective difference. That Mr. Spencer does assert both unlike objective orders and their necessary concomitant, objective difference, is evidenced by the admission that his "argument assumes, and is obliged to assume, fundamental differences of objective order which are symbolized by fundamental differences of subjective order." (Prin. of Psy., § 95.)

This, after the conclusion that there is nothing objective answering to our conception of pure order or pure difference, is astounding. It may be well to say that no quibbling over the meaning of "order" and "difference," as he uses them, would, even if Mr. Spencer were capable of it, extricate him from difficulty. They mean more than continued existence; for continued existence would not produce the spacial and temporal orders and their differences. Aside from this, continued existence is sequence, and sequence implies difference; so we are not, in any case, to be deprived of the "pure relations" of sequence and difference. More than this, objective activity is admitted; activity implies sequence, and it implies a difference additional to that which sequence implies: again we see that sequence and difference in consciousness have counterparts outside. If, according to Mr. Spencer's rule, difference of time or sequence implies its correlative, likeness of time or co-existence, we may claim the latter too.

There is a kind of argument which, in justice to Mr. Spencer, must be duly noticed. In addition to the arguments considered, he propounds the following.

"A nerve is a thread of unstable nitrogenous substance running from periphery to centre or from centre to periphery, along which, when one of its ends is disturbed, there runs a wave of molecular change to the other. The wave of change set up by a peripheral disturbance is not like the action which causes it; and the waves of change set up in different nerves by different peripheral disturbances have no such unlikeness as have the disturbances themselves. Hence being obliged to concede that the kind of feeling depends either on the character of the nerve-centre, or on the way in which the molecular disturbance is brought to the nerve-centre, or both; it becomes inconceivable that any resemblance exists between the subjective effect and the objective cause which arouses it through the intermediation of changes resembling neither." (Prin. of Psy. § 87.)

"Indeed it needs but to think for an instant of a brain as a seat of nervous discharges, intermediate between actions in the outer world and actions in the world of thought, to be impressed

with the absurdity of supposing that the connections among outer actions, after being transferred through the medium of nervous discharges, can re-appear in the world of thought in the forms they originally had." (Prin. of Psy., § 94.)

When will those who deny knowledge of noumena, cease to employ the supposition that they can contemplate things in themselves? To Transfigured Realism, external agents, nerve-fibres, and nerve-centres are phenomena; and if they are but phenomena, the underlying noumena are not revealed. How, on this theory, is it possible to know that the effect *known* subjectively is not like the cause which *appears* objectively? To know this, it is necessary to know more than mere manifestations; and more than manifestations, therefore, Mr. Spencer professes to know.

The Realist is not at all perplexed by the implication that a psychical effect is in a considerable degree like its physical cause. He is not at all abashed by the appearance of dissimilarity between external agencies and nerve-activities. Considering that these activities are extremely minute, numerous, and capable of infinite combinations, he deems them very good material for representations. Finding that he has the vaguest and most mobile conception of what they really are on their objective side, he is not surprised at anything they may appear to be on their subjective side. The production of likeness through nerve-fibres is no more inconceivable than is the transmission of sounds and pictures through a wire. Analogies are plenty. Take an example which has been hackneyed by repeated use for purposes of Agnosticism. Imagine a blind man poking objects with the end of his walking-stick. He touches one and then another, and two effects are produced upon his hand. Now the stick is pushed against a resisting surface, now against a yielding surface; and upon the hand are exerted successively greater and less resistance. Something pulls the stick, and the stick pulls the hand. The stick being held against a stationary object, the hand is stationary; the stick being held against a moving object, the hand is made to move. Sensible vibrations might be communicated from the remote to the near end; as might heat, if the stick were of metallic sub-

stance. In all these cases, the correspondence of degree is too obvious to require more than mention. But we need not resort to analogy. In communication through nerve-fibers there is undoubted equivalence of intensity; and, as is exemplified by temporal distinctions, equivalence of kind. If we were not so profoundly ignorant of the details of neural action and mental action, we should probably be overwhelmed by exemplifications.

The reader's attention must now be called to what Mr. Spencer is trying to prove. He is laboring with all his might to prove that nothing like what we call the objective world can be produced in consciousness. Pointing out the great unlikeness between the external world and nerve-structures and functions within, he thinks we should be convinced that the former cannot be in the least resembled by any phase of consciousness. But we must ask him to hold to his belief that the external world, as we know it, lies completely in consciousness. He points to something and says, this cannot be represented in consciousness; whereas he should have pointed to it as a representation, and then shown us that there is nothing which it truly represents. All that he said about the organ of mind or its medium of communication with the external is irrelevant. Mind he holds to be not unlike the external world but in part identical with it: the external world is to him but a mass of phenomena. No matter then what mind, objectively considered, may appear to be, it is furnished with the representations which he has been trying to show it cannot frame. Thus is the Realist relieved of the burden of showing that ideas of external things are possible. Mr. Spencer admits the possession of just such ideas: all he denies is that there are corresponding things. We hold firmly to the admission that the disputed elements are within the mind, since it destroys all arguments from our impotencies of conception.

We come now to an error at which all the group of arguments above discussed converge; it is the *reductio ad absurdum* of them all. Says the author: "subjective consciousness determined as it is *wholly by subjective nature, state, and circumstances*, is no measure of objective existence." (Prin. of Psy., § 86.)

The proposition, that consciousness is determined "wholly by subjective nature, state, and circumstances," is what he has, with such poor success, been endeavoring to establish. If the effect is not entirely determined by the nature of the affected, the cause may determine some of its ingredients, which will be unlike those determined by the affected. Yet if Mr. Spencer has proved as much as he desires, he has proved something more than he believes, and very much more than we can believe. What does he mean by saying that "every argument proving that our conceptions of Time are relative, falls to pieces on withdrawing the assumption that there exists some form of Things from which Time, as a form of Thought, is derived"? What did he mean by previously saying something similar to this concerning Space, phenomenal and noumenal? And what did he mean by adding that "the assumption of an objective source for the subjective relation of Difference, is implied in the last two assumptions"? (Prin. of Psy., § 95.) He meant something implying that modifications of consciousness are *not* wholly determined "by subjective nature, state, and circumstances." Known to furnish some of the ingredients of consciousness, external being may be supposed to furnish many of them. Leaving Mr. Spencer's admissions, and passing to considerations of a more positive character, we shall find that external agency is the controlling factor in the production of that order of affections called by Mr. Spencer objective. Their chief peculiarity is that their "conditions are often not present, but lie somewhere outside of the series." (First Prin., § 43.) The thought that the characters of these are entirely controlled by the subject is not to be entertained. We cannot think that the same external cause lies back of an ant-hill and a volcano; or that the difference between the experiences of lying upon a bed of sickness, and flying past landscapes at an exhilarating rate of speed, is determined wholly by subjective change. To imagine such absurdities would be to supposititiously introduce into the subject a mass of complicated and cumbersome machinery, and to reduce the object to entire and impotent homogeneity. This is an implication repugnant to Mr. Spencer's views.

Before changing the point of view, I must call to the reader's attention that each criticism upon what Mr. Spencer has said contrary to the existence of similarities between mind and not-mind, has led us more or less directly to the conclusion that there probably are such similarities.

§ 61. Without qualification, it would seem that too much stress has been laid upon primordial likeness between the internal and the external. Knowledge of things wrought out of contrast, is a very large share of all knowledge. What the reader is particularly desired to realize is that the greatest fundamental dissimilarity between the mental and the extra-mental would not preclude an original and increasing likeness between them. This is true if the only attribute common to an external and an internal mode is that they both differ from some other internal mode. Let their manner of difference be as contrasted as you please, still one mode resembles the other in differing from a third. As the number of modes with which they differ increase, so will their mutual likeness increase. What is true of single modes, is true of sets. If one set of internal modes becomes transcendently distinguished from another set of internal modes (as the subjective and objective sets have done), one set or the other will probably be extremely like external modes. And this, which holds of general contrasts, holds more completely of intenser special contrasts. Primordial unlikeness, as well as primordial likeness, between mind and not-mind, forms, therefore, a good basis for knowledge of external things.

Without qualification, it would seem that too much stress has been laid upon ultimate likeness between ideas and their outward correlatives. The positive advantage of unlikeness must be insisted upon. It is commonly supposed that it is desirable to have conceptions as nearly like things as possible. This is true after other purposes are subserved; but untrue in so far as it ignores their claims. Regard must be had to the nature of mind. Some modes the mind sustains with ease; some, with difficulty; and some, scarcely at all. Ideas should

be produced without effort, and prolonged without fatigue. They should be definite, yet easily modified. Such requisites are cheap at the expense of slight similarity. Regard should also be had to the natures of things. Their demands for exact representation are not equally urgent. It is possible that representative accuracy may be most judiciously distributed while the greatest quantity thereof is not attained. Again; regard should be had to the nature of ideas themselves. They are symbols; and symbols are often valuable in proportion as they vary in certain respects from what they symbolize. For purposes of felicitous separation and combination, they may be suffered to lack properties by which separation and combination would be unduly antagonized. The numerals furnish an apt illustration. Their only conspicuous resemblance to things is their difference from each other. This being maintained, other characters, if as easily handled, would do as well. Substituting one for another will not affect their completeness. One class of things they represent as accurately as another. Notwithstanding the extreme unlikeness which all this implies, to increase their resemblance to things would, in a progressing ratio, decrease their usefulness. Now let us turn to the resemblance of numerals to things, and observe how it produces in the end a greater quantity of similarity than a more complete primary resemblance could produce. The fundamental idea underlying mathematics is that of equality and inequality—that is, likeness and unlikeness in respect of quantity. Numbers, in their various combinations, are capable of exhibiting various likenesses and unlikenesses to each other. So far, and not much farther, do they resemble the things for which they stand. Wonderfully much, nevertheless, may they express. Beginning with a few marks on a surface and adding to their number, according to rules of combination, I at last produce two numerals, or sets of numerals, as near alike as my hand can make them, and know from this that two celestial events will coincide. Or I produce unlike scratches, and read that the coincidence will not take place; and, from the degree of numerical unlikeness, know how much the variance from

coincidence will be. It is evident that in this case the production of the ultimate representative correspondence is contingent upon the employment of symbols extremely unlike the symbolized realities. How circumscribed would be mathematical calculations if we should employ symbols very much resembling the objects which the calculations concern, is readily appreciable. We should have more similarity in the first instance, but far less in the end. To apply the analogy, ideas must not be too much like things. If we put overmuch resemblance into the process of thought, the latter will be clogged, and we shall obtain so much less resemblance in the shape of products. To resemble much, is to simulate seldom, and to simulate the most important things never at all. Still less than before, therefore, does it appear that mind is so unlike not-mind as to have no realization of its nature.

§ 62. Mere resemblances between modes within consciousness and modes without, would not amount to knowledge of the latter. But they would form the basis of such knowledge. Given internal counterparts of external modes, and that consciousness can figure to itself exterior reality, is no transcendent mystery. Its only perplexity is that the symbol should not be contrasted with the thing. The reason that we do not seem to look through the symbol is obvious enough: ideas are but affections of the mind; and as such are not distinguishable, as they are not distinct, from the act of cognizing them. But when we come to the fact that the idea is not distinguishable from its external counterpart, we arrive at a real perplexity. While from the certainty that the sun, for instance, is beyond consciousness, we infer that knowledge of it must be representative, we marvel that in perception the representation should not stand opposed to what it represents. Some have indeed thought that contemplation of externality does involve a duality of objects,—the representation present to consciousness, and the thing brought before consciousness by reference; but their supposition, extremely unscientific in method, is negated by both consciousness and reflection. The reference, of which many so

glibly speak, is but a name for concrete ignorance; a verbal substitute for rational explanation. In neither memory, imagination, nor perception, is there recognition that what is before the mind is a mere representation of something else. All that we contemplate we seem to look upon directly. The contemplation is not consciousness of something, plus a reference to a second something beyond. We are aware of no such reference; and if it did exist, it would be consciousness of the kind to which it is supposed to be auxiliary, even to the requiring of a reference auxiliary to itself. To escape the difficulties which are thus started, many adopt belief in consciousness of externalities; by doing which, they rush into a denser maze. Objective considerations necessitate the separation of outside things from the sphere of consciousness. Introspection does the same; for objects do not seem to be within consciousness, as subjective things are, but to be beyond consciousness while affecting it. There is no avoidance of the paradox, that we seem to be immediately aware of the thing as something out of consciousness. Question the least philosophical, and you will learn that he believes himself conscious of externalities. Question him from another point of view, and you will learn that he believes them to be distant from the mind, and therefore out of consciousness. In consecutive breaths he will say virtually, that the mind is the environment of the things contemplated, and that the things are the environment of the mind. Is there a possible reconciliation? Unwilling to question the veracity of consciousness, we are unable to believe that we are conscious of the thing as not in consciousness, nor even in contact with consciousness. To decide that we are conscious of the thing only as an existence, is to convict consciousness of a lie, without cancelling the present suspicion of an inconsistency. For consciousness proclaims its communion with more external than existence, and if it so far falsifies, it is under the additional imputation of testifying that it grasps *existence* which is beyond its sphere. Thus we are forced back upon the problem with which we set out. If we will not give the lie to consciousness, we must find congruity in the circumstance that the symbol is not contrasted with the thing.

Though two things cannot be absolutely the same, they can be relatively, that is, approximately the same. When we consider that intrinsically a state of consciousness is but a portion of a mode—when we consider that in the exclusions and presentations of consciousness, essentials are divided from essentials; it will not seem impossible, or even incredible, that highly evolved ideas should present only that aspect in which they are one with the objective things they represent. If they do this, observe, consciousness would err if it should discriminate between the mode presented and the mode represented: by the hypothesis, as far as the former is presented, it is not in reality contrasted with the latter; and as far as the latter is represented, it is not in reality contrasted with the former. Consciousness may, therefore, be entirely right in not contrasting the symbol with the object symbolized. Mark that the supposition is not that consciousness pronounces judgment that the symbol is like the thing, to do which, would require other symbols; but that consciousness fails to observe distinction between the symbol and the thing—compares them no farther than they are alike, which is not to distinguish them at all. The manner in which consciousness became possessed of the happy bias towards identification, to the exclusion of distinction, will be subsequently considered. What is before us now is the legitimacy of ignoring the distinction; and we have found that in as far as the idea is presented, or the thing truly represented, there is no basis of distinction, because no difference. But while we are thus able to justify consciousness in its negative deliverance, we think strange that it does not disclose the whole truth by a complementary positive deliverance. Though not distinguishable in perception, we know that upon reflection the idea and the thing are made to differentiate into a duality of things,—alike, it may be true, so far as one stands for the other, yet in other particulars very unlike. It is the duality which perplexes us.

Perhaps the sense in which consciousness should be largely understood is analogous to the one employed when I say that the considerations before us should extend the acceptance of Realism. I do not mean the modes of consciousness which obtain in any

mind while it entertains the considerations; because the considerations do not change identity upon traveling from mind to mind, and are even capable of being present to two or more minds simultaneously. So may consciousness be understood to decide that a form presented is the form to which a sensation is attributable. In so far as ideas are mere forms of being, and in so far as a form here and a form there are identical, consciousness is justified in positively identifying present and absent things. Still, as we cannot suppress distinction between external being and the consciousness by which it is known, we are puzzled by the fact that a unity should appear where a duality exists.

Suppose instead of viewing the likeness of nature between the idea and the thing, we turn to their nearness of relation. Some thinkers have considered the thing to be the objective correlate of the idea; and the idea, the objective correlate of the state in which it is contemplated. Others, recognizing that the idea and its contemplation are identical, have considered the thing as the objective correlate of the contemplation. The implication is, that one party has mistaken the relation which the object bears to the contemplation, for that borne by the idea; or the other party has mistaken the relation which the idea bears to the contemplation, for that borne by the object. In other words, some have (not in perception, but in objective speculation) put the idea in the place belonging to the object, or others have put the object in the place belonging to the idea. Going a step farther, it will appear that neither party is entirely wrong. It is manifest that the object is not the sole correlate of the contemplation; because, as the contemplation is consciousness, something known in consciousness must be its correlate. But it is equally manifest that the contemplation is not alone its own correlative; for, if it were, it would not be a thought of something other than itself. The thing and the idea bear the same kind of relation to the contemplation; the idea and the contemplation are one; the thing and the contemplation bear the same kind of relation to the latter. Here again, we seem to have found only an analogy, not an identity.

Our several efforts to identify ideas with things, though only relatively successful, have taught us how surprisingly near they may approach towards a community of nature. The necessity of stopping here, were it obvious, would not preclude the claim of having proved consciousness to be practically reliable, if not theoretically so. But it is easy, with the insight attained, to do much more by way of justification. Consciousness does not testify that we are conscious of outside objects; its testimony, even in perceiving such, is that the mind is construing to itself objects extra-mental. So far our endeavor has mainly been to identify ideas with things as objects of consciousness; let us now try to identify them as objects of contemplation. Very likely an analogy will aid us. Instances of things standing for each other as objects of contemplation are numerous, though little liable to be observed. Take one appropriate by reason of its simplicity. I imagine myself to be viewing a landscape through the window; but you draw me nearer to the window, and show me that the landscape is exactly pictured on the pane. Nevertheless I was contemplating the landscape, because I thought I was—the thought being part of the contemplation. If tomorrow, the window being raised, I look upon the landscape, thinking it to be the picture; the picture, more than the landscape, will be the object of my contemplation. The case is one in which faith is the determining circumstance. The fact which it is its function to illustrate, is that the relation which an object shall bear to thought may be determined by the thought. We do not realize the extensive faculty of control we have. By the slightest movement of the body, can we change the relation which everything in the universe bears to it. The tiniest animalcule has some power of influencing all that is. Carry the impressions which these reflections make, to the consideration of the act called thinking. It needs only an operation of the mind to make anything the correlative of a thought. If in the thought two objects are identified, they are thereby made alike correlative of that thought. Which is the more intimately related to the thinker in other respects is a matter of utter indifference: we are considering them as objects of thought;

and as such, one is the correlative just as the other is. Though one be present to, and the other absent from, consciousness; this does not matter if the internality of the former is suppressed from the contemplation. Though the contemplation of one be consciousness thereof; this is of no moment if we discard from our consideration every element of the act in excess of mere contemplation. As far as the act of thinking of two objects is one, they bear one relation to it. We have found more than an analogy. While it is true that the thing and its representation are not identical, we perceive that they exist in the same relation to the thought. Each is the correlative of the contemplation — each its object. This is true of the whole, so far as they are similar; and true of any part, down to the limits of similarity: as far as there is dissimilarity, the outer correlative is wanting and the mind deceived. The oneness of relation has been represented as depending on the act of unification, because if the objects were separately thought of they would be correlatives of separate thoughts, and if only one were contemplated it alone would be the object of contemplation. When thought identifies objects, it gives them not like relations, but the same relation, one relation, to itself. It will be observed that the idea, as well as the thing, is represented as correlative to the contemplation. The reason of this is that we undoubtedly look upon the idea when we look upon the thing; for otherwise the idea would be a mode of consciousness of which we are unconscious. Though in respect of its peculiarity of being within consciousness, the idea is not employed as a representation; yet there is ever a consciousness of something, and this consciousness is so intimately involved with all we contemplate that it is sometimes construed into consciousness of the thing. The doctrine which both reason and intuition sanction is, that we are conscious of the idea only; but contemplate in one concrete act both the idea and the thing (the thing, however, more than the idea). That this is the explanation of our cognizance of exterior existence, Mr. Spencer would probably admit; and if the admission be made in the case of existence, it cannot on any *a priori* grounds be denied in the case of other attributes.

§ 63. The knowledge which criticism and analysis have shown to be probable, synthesis will show to be inevitable. On the part of Mr. Spencer, it is admitted that Evolution has made the mind aware of an outward cause of its own modifications. For the convincing of others only, is it necessary to discuss the process so far as it relates to existence of the cause.

In the dawns of consciousness, we should look in vain for more than the germs of present ideas. If we find these we shall find enough. The first hint at causation probably presents itself in the shape of invariability. In the sequence of primitive states of consciousness, variability is in many instances broken by constancy. Some sequences are more or less invariable; some are absolutely so. Moreover, there is conspicuous persistence and recurrence of the same states. Experiences of uniformity, continued throughout ages, would leave, as a cumulative product, a mental habit expressive of more than concrete uniformity. This incipient abstract of uniformity, employed to construe each concrete uniformity, would be the germinal appreciation of causation.

Here be it said, once for all, that kindred ideas do not appear in absolute lineal succession; but that whole families are brought forth in one generation, and developed concurrently. As soon as the slightest appreciation of a concrete uniformity has appeared, the way is open for the advent of another constituent of the idea of causation. Uniformities lead to anticipations. Anticipation at first amounts to the feeling that something *will* be; and this contains the faintest sensibility that something *must* be.

The transition from fact to necessity can be, however, only initiatory until other ingredients of the idea of causation have been obtained. Sequences, originally mere successions of occurrences, repeatedly exhibit instances of something more. Soon the least variable and least remote of them are distinguished as antecedent and consequent. While *a* is always immediately followed by *b*, it is never immediately followed by *c*: therefore *a* and *b* gradually become cemented in a relation closer than exists between *a* and *c*. The class of antecedents and consequents, once germinated, is rapidly increased, until

perhaps a rudimentary abstraction is formed. Dissociation, as well as association, plays an important part. Seldom, and then only distantly and at random, does *b* follow *c*, *d*, or *e*. Its not being sequent from them is, after many experiences, appreciated, and the appreciation strengthens its association with *a*. In this way is the mind prepared for in a measure realizing the dependence of the consequent upon the happening of the antecedent. A nearly allied appreciation probably carries forward the suggestion of dependence. *A*, *B*, and *C*, occur independently of the happening of *a* and its consequents, and build up an impression of so doing; *b*, *c*, *d*, *e*, etc., never do, and so build up, with regard to themselves, a contrary impression. From infinite repetition the respective abstracts follow, heightening each other. The dependence recognized as yet, is not that of effect upon its cause. It is only the want of disconnection.

Experience of one thing influencing another is most likely a prerequisite to a further grasp of causation. The experience is proximately had in consciousness of mental affections inducing, modifying, abolishing each other. A sensation awakens a fear, a second sensation changes it to another fear, a third lessens, and a fourth dispels it. Emotion, being the cumulative incident of experiences, gives a very strong impression of being aroused and sustained by every experience which excites it.

Influence is one shade less than power. The power of an antecedent to produce its consequent derives at once a further and a complete realization from a certain oft-recurring and comparatively definite experience. In volition is experienced both sides of the exercise of power. The exertion of power by the antecedent is felt in the consciousness of effort. In the direct product of volition, as far as it lies within consciousness, and in the sense of resistance to its efforts, is experienced the production of the consequent by antecedent power. Together, the two kinds of experience constitute an experience of causation. The antecedents of volition, in connection therewith, are, we must add, experiences next in importance to volition itself. Willing was not formerly what it is at present; but so

much the better: it exhibited relatively much less of intelligence, prompting and directive, and much more of exertion, causing and affected. Whether volition alone would have been sufficiently suggestive of causation, is of no particular moment; since it appears not to have been unaided. Other experiences, such as those named, were valuable as developing forms to be subsequently employed; and especially valuable as bringing under the category of causation internal changes which volition does not control. While to volition we are indebted for strengthening and integrating these experiences; to them we must accord the merit of having strengthened and extended the implications of volition.

All the elements of a vague realization of causation being supplied and integrated, there would rapidly develop a certain mental formula in which each experience would immediately upon production be enveloped. In some instances the formula would be filled by a reproduced experience; in others, the complementary experience not being reproducible, there would be left in the formula a blank to which the mind could not be completely oblivious. The blank—the unfilled locus of a cause—there would be an effort to fill up with an appropriate reproduction. Experiences being so much more readily and completely realized by means of the formula, there would be a growing tendency to employ it in the case of every experience. Such tendency would be greatly augmented by the experience of new cases in which the formula is presented filled, and of cases in which the void at first appearing is afterwards occupied. The progressing recognition of the invariability of the connection between effect and cause would produce a feeling of the universality of this connection. The mind would ultimately exhibit a groping for the cause of every affection. Made sensible, by instance upon instance, that when sensations are contemplated there is a blank in the formula, and that when other modes are contemplated there is at best a partial blank, which no re-presentation of its experiences can fill; it is gradually guided to the formation of a representation of something not among its experiences.

We have been moving too hastily, and must now turn back to the beginnings of a parallel development. The apprehension of something external is not likely to appear until externality has become to some extent familiar to the mind. For this to take place, is more than possible. Qualitative externality is continually present to consciousness. Pain is external to pleasure; one pain or pleasure, to another. In short, every contrast is a double instance of externality. Externality is also presented as appertaining to quantity; as when a loud sound or a severe pain seems ideally divisible into like portions not co-incident. The notion of quantitative divisibility probably results from experience of sounds, pains and the like, in various degrees of intensity. Increase and decrease of intensity would itself have the same tendency; and would even directly suggest externality appertaining to quantity as such. Temporal externality has something in common with the others, but much peculiar to itself. Mental affections are observed to occupy different sections of time, lying external to each other in an indefinite series. It may well be, that there is something in mental experiences still more nearly approaching to local externality. Those which are simultaneous are not looked upon as coinciding, but as laterally dispersed. The accumulation of memory is doubtless the most important store from which are drawn materials for a conception of externality. On the one hand, memory discloses that modes now present were once not within consciousness; on the other, that modes once present are within consciousness no longer. Anticipation, too, is belief that modes now absent will hereafter be present. From the apprehension of modes as not internal, the transition is short to the apprehension of modes as external. Especially is this so because former and future modes are pictured as external to present consciousness. There being no dearth of materials out of which to construct the symbol of a new kind of externality, we clearly understand how it is that when the mind seeks to fill up a partly blank form of causation, it is enabled to provide a representation of something external to itself.

The materials being furnished by experience, what induces the construction? We have seen why the mind struggles to conceive a proper cause; but have not yet learned how it is determined to conceive a cause which is external. Conceiving at random, it might sometime form the right conception, which would be approved as soon as formed; or it might by random conception obtain only a hint, which would be a guide to subsequent trials, each resulting in a further hint, and so on to ultimate success. Such process has doubtless been an aid throughout the whole progress of the development under view. I am not disposed, however, to name chance as the chief factor in production of the conception of externality. Examining the mind, I find a more efficient in necessity. The mental modification to be accounted for is, after all, not very elaborate. A cause is necessarily conceived as next to completely external to the mind. There has been no experience of coincidence of cause and effect: in all instances each has been external to the other. In almost all experience, when an effect was contemplated the cause has seemed to be external to present consciousness. In almost all experience, the cause has also seemed to be in a manner external to preceding consciousness; for, being external to all modes contemporaneous with itself, is being so far external to the mind. As so far external, imagination would immediately picture the hidden cause. Then must begin a process of exclusion. Memory, which would be more than at any subsequent stage relied on, would testify that the cause occupied no place in preceding consciousness. Yet in preceding consciousness uniform experience would indicate the cause to be. Present consciousness would enforce experience by excluding the cause from its own limits. Here is a direct conflict of tendencies: imagination endeavoring to locate the cause in prior consciousness; memory excluding it therefrom. There could have been but one resultant. Observe that memory does not exclude the cause from all parts of immediately past consciousness with equal power and effect. Lateral to the phases which are remembered most vividly and persistently, are other phases the memory of which is indefinite and unstable. The

first effort of imagination would be to locate the cause at the most vivid point in preceding consciousness. This being the point of greatest resistance, the attempt would be deflected to points of less and less resistance; until a point would be reached where, both memory and resistance being absent, the proper location would be found. To the past, but not to past consciousness, the cause must at last be relegated.

It is not thought that the process just described is, or has been, carried on from beginning to consummation in single individuals; much less that it involves but a single experience. It has probably been transmitted from parent to offspring throughout many generations, as an hereditary mental bias absorbing growth from each sensation. Neither is it supposed that the first cognizance of external cause is more than a vague and momentary suggestion. Nay: only by slow accretions could it become so much. If the breaking in upon placid consciousness by a violent nervous shock, faintly implies the operation of an antecedent not in consciousness, it is only by virtue of the same thing having been partly suggested numberless times before. Infinitely slower than language can depict is the process, and less tangible the product.

Before tracing the process of further development, let us dwell awhile on the evolving product. That which we are obliged to treat as the earliest idea of external cause is, strictly speaking, a feeling rather than an idea; sensibility largely predominating over sensibility to definite forms. Still, the feeling must have some representative qualities; else it is a feeling of nothing but itself. As the mind inclines to old forms, it is likely that the first representation of an externality is substantially some old form, located out of vivid consciousness. The mode which serves as a representation, doubtless varies with the individual and the occasion, and is while it lasts but a series of provisional substitutions. While we thus admit the inadequateness of the representative mode, we must observe that it is not as inadequate as high abstraction makes it appear. There are qualities besides externality which it always portrays. All experiences of causation within consciousness, have presented

the cause as exercising power; that is, as acting on something: any conception of causation by the external must do the same. Necessarily the cause will be, from the start represented as in a state of action.

Another characteristic of the cause to which the earliest portrayal must extend, is temporal relationship. Familiarity with time is long anterior to acquaintance with causation. Time has been given in every sequence. In relations of sequence every experience of internal causation has been presented. To leave time out of a representation of causation by the external, would not be natural, nor, we may add, possible. The representative mode would of necessity be temporally qualified. Of necessity, the represented activity of the cause would be activity in time.

Experience and necessity unite in determining that the first representation of external cause shall portray it as something acting in time. Eventually the conception becomes a representation of substance acting in space and time. Before inquiring into the transformation, let us remark how like the last is the first conception. A something acting in time, if we but add occupancy of space, becomes a substance acting in time and space. Our problem, then, is how to account for the representation of space-occupancy by external cause.

A review of the materials at hand will go far towards the required solution. Direction is within the sphere of experience. Prospection acquaints the mind with one direction; memory, with one extremely opposite; and every approach to external location, with a third.

Extension in two directions and occupancy thereof is given among subjective experiences. In present consciousness, modes are arranged laterally, and in the field of past consciousness they are arranged both laterally and lineally. They seem, when viewed in mass, to fill up extension of two dimensions.

As bearing upon the question of what things consciousness may symbolize, we shall consider some of the things by which consciousness is symbolized. Consciousness is for many purposes symbolized by a line. Though such symbolization is posterior to, and dependent upon, some acquaintance with spacial extension; nevertheless, that

it is ever available, proves something in consciousness bearing resemblance to a line. In this instance the likeness consists in a series of modes. Yet it is only by very high abstraction that we can speak of the line of consciousness. It would be nearer the truth to look upon consciousness as a field stretched out before the mental view. Accordingly, for many purposes we do this, and with good effect; proving that consciousness does bear some resemblance to a plane. The resemblance, in this instance, consists in a series of co-existences. Still there is too much abstraction to answer many purposes. With great advantage, and therefore with great propriety, consciousness is figured as a current flowing past relatively permanent modes of mind, and gradually wearing them away. It is also, with good result, represented as like a flow in presenting depth as well as length and breadth. The semblance to depth is recognized in the impression of closer proximity of modes than would be allowed by superficial arrangement. Severally they seem to have depth as much as they seem to have length or breadth; and collectively they seem to roll, and tumble, and wind about each other almost indiscriminately. A further approach to concreteness brings us to the very useful conception of consciousness as an ambiguous compromise between a point and a sphere—as an expanding, contracting sphere, irregular in outline and heterogeneous in composition. This conception results from, and is justified by, the fact that co-existent states are huddled together in the mind, it never knows how; while those that preceded have left the record of having occupied the same general locality. Are we authorized to assert that consciousness presents the three spacial dimensions because a line, a plane, a flow and a sphere correctly symbolize it? I think we can go no farther than to affirm that there are in consciousness elements so much resembling the spacial dimensions that either set may be used as symbols of the other.

Material being shown, the process of adding spacial qualifications to the primitive conception of external agency does not seem so mysterious. Of the same effect will be the disclosure that something of such qualifications is connate with the con-

ception itself. The moment a cause is located as lateral to past consciousness, it presents more than temporal externality, though less than spacial externality. To apprehend this clearly, it is necessary to advert again to the process of location. The region in which the mind first seeks to locate an unknown cause, is that where all known causes of past and present modifications are located; that is, the field of retrospection. But memory resists location in this field; completely along the line directly before the view, and with decreasing completeness towards the lateral limits. The effort must be continued; and, as it necessarily follows the line of least resistance, a point is at last found where there is no resistance. The outness which is at this stage recognized is a little more than temporal. It is an outness that existed when, a moment ago, the cause and then-existing consciousness were temporally coincident. It is spacial outness in one direction. Simultaneously outness in many directions is recognized; for a single outward cause cannot find complete location until many have been almost located. In its efforts to locate the hidden causes which conspicuous experiences suggest, the mind does not reiterate its efforts against the same points, nor even in the same general direction. Now a cause is almost placed on one side of consciousness, now a cause, often the same cause, is almost placed on the opposite side—developing, simultaneously with the complete location of causes out of consciousness, the idea of a system of causes bounding consciousness on every side. As the language here used is very figurative, a word must be said about direction. The only direction which is usually remarked as being presented in consciousness is temporal. Less obvious, but of no less present importance, is a kind of direction common to both time and space; namely, that which is involved in lateral connections of co-existent modes. This is introduced by time, but afterwards almost exclusively appropriated to space. Now as to the application. The cause which is first located out of consciousness is necessarily given something like direction as related to consciousness. Such relation is overwhelmingly temporal; but it is noticeable that in as far as the direction is lateral it is both

spacial and temporal, and that in as far as it exceeds lateral direction in consciousness it is spacial. The same conclusion may be reached by shorter process: outness from consciousness, whatever else it may be, is spacial outness, and spacial outness can only be in some direction. But then, at first the direction is in no case fixed and determinate. By a colligation of experiences, however, are permanent distinctions of outward direction obtained. While spacial externality is closely involved with temporal externality, one cause is located here, another there, around the flow of consciousness, according to vacillations in the point of least resistance. This experience of course develops a tendency to give each cause a separate location. A tendency so acquired is not, it must be remarked, the only, nor even the important, factor in the case. The causes which environ consciousness are looked upon as modes very much resembling certain remembered modes. In particular, they are conceived to be laterally arranged, since not in consciousness, around about it. Such arrangement is according to the experience of consciousness that modes are exclusive of each other, filling up extension. Whether to these modes is ascribed anything like depth, need not be determined, as it is obvious that other modes are, as experiences accumulate, necessarily imagined back of them. The necessity which compels the conception of modes just outside of consciousness, likewise compels the conception of modes still farther outside. Conceptual reproduction of a cause is almost as much in requisition in the case of external modes as in the case of modes not external; and every increase of familiarity with externalities augments the necessity. Sometimes the antecedent sought appears to have been an internal mode; as where a volition, by changing the circumstances of the organism, reflects new sensational impressions upon the mind. In other instances, because of prior uniformities of sequence, the antecedent seems to have been some external mode which previously affected consciousness. In the majority of instances, however, the antecedent is not discoverable among internal modes, nor yet among those external modes that immediately affect consciousness, and is

therefore relegated to a region outlying both consciousness and its immediate surroundings. As causes seem to lie back of sensations, so do other causes seem to lie back of these.

We have traced the notion of external cause from the beginning of its evolution to the point where it represents external substance acting in space and time, upon the mind and upon itself. Both material for the construction and the construction itself have been accounted for. To the very critical, there may seem to be a great difference between the raw materials furnished by experience and the elements of which the structure is ultimately composed. Indeed it may be remarked that there are elements in the complete idea which experience, in its narrow sense, did not provide. We have seen, I think, how all the elements are wrought into ultimate shape by the mind's operation upon itself. If the mind has contributed some material, it has done no more than it always does when, out of primary forms, it constructs derivative ones. To the very critical, it may also occur that all the factors of the process of construction have not been named. The truth of the objection is very favorable to the views above promulgated. Great advantage might have been derived from a more exhaustive exposition. I shall illustrate. When dealing with the earliest representation of an externality, we noticed how it was bettered by adding to it modifications which it lacked at first; but did not remark how it was perfected by depriving it of modifications which at first it had. Thus we are chargeable with omission. Externality being first represented by a mode very unlike anything external, misrepresentation would be rapidly eliminated. Every recognition that something internal is not the external cause represented, would remove a resemblance of the representation to this thing internal. The exclusion of qualifications from the representation would be both a subtraction of error and an addition of truth. This process of exclusion, however, although continuous throughout the evolution of ideas, is too subtle for detail, and is not sufficiently prominent to require it. The concurrent process of direct inclusion very properly received our entire attention.

To protract our review much further is needless. Likeness after likeness, between the world of phenomena and the world of noumena, has been incidentally disclosed in exhibiting the synthesis of symbols, which was the subject of investigation. Pages back it would have been competent to stop and claim a sufficient positive refutation of Mr. Spencer's doctrine, that between mind and not-mind there is an absolute dissimilarity of nature. Yet, lest it be not obvious that consciousness can symbolically simulate something more definite than the abstraction, "substance acting in space and time," it is advisable not to omit a few suggestions illustrative of the fact.

That Figure is portrayed as belonging to outside agencies should not be perplexing after the foregoing explanations. Form is given in every state of consciousness. This is true of both forms of being and forms of activity. Difference, Likeness, and Identity, which things outside of consciousness present, have counterparts inside. As to Number, Homogeneity and Heterogeneity, Whole and Part, any reader may be trusted to make appropriate reflections. Size is relative extension. This is constantly presented in consciousness; as are also Separability, Inseparability, and Ideal Divisibility. Of Mobility and Immobility we may say the same. In the abstract, Incompressibility is an exclusion, and Coherence, a cohesion of modes; and when so regarded, consciousness is remarked to present numberless instances of each.

Rich in materials, it is not surprising if the mind is felicitous in construction. The process beyond the point to which it has been carried must be left to the reader's imagination, aided by the last exhibition of materials. My aim was to account for the idea of substance acting in space and time.

I wish to preclude a probable criticism by observing, that ideas pre-logically developed are at least as reliable as ideas logically developed. It may be said that I have been arguing on the supposition that the disputed attributes are possessed by that which is called "The Unknowable Cause." If I had done this, I could claim to have shown the self-consistency of Realism; but I claim to have done much more. Employing only necessary mental modes, the effort was to show how these

are constructed into ideas of noumena. If this has been done, such ideas of noumena as have been accounted for, guarantee the existence of noumena possessing the qualities which these ideas represent; for the ideas, being necessitated by facts within the mind, must, even to their aspect of identity with noumena, be consistent with facts without the mind.

But if it were necessary to rely upon logical process, we should not be without rational support. For instance, when *b* follows *a* in consciousness, we may conclude by a logical process that the immediate cause of *b* did not precede the immediate cause of *a* outside. Given the present affections of consciousness, and we can logically justify the preponderance of our beliefs in regard to noumena. To them the rules of logic apply with good effect. Logical, as well as pre-logical, conclusions, then, evidence a community of nature between the outside world and our ideas of it.

§ 64. A congruity, greater than might have been anticipated, remains to be pointed out. Before attempting to explain how thought can transcend consciousness, it was said, "that a like mystery is presented in every act of memory and anticipation." To have found that one explanation is sufficient to clear up the several varieties of the mystery, would have been a significant coincidence; but to have found that cognizance of the external in space is actually evolved from cognizance of the external in time, brings our detached speculations into remarkably complete congruity.

The symbol of a remembered cause is, to a certain extent, a reproduction thereof—is a reproduction of the cause to the exact extent to which the cause is before the mind. The reproduction is not only like the cause, but, in a degree, is the cause. Just as the posture which the body assumes to-day may be identical with one which it has had before; so may a form of mind be, more or less, no other than a form before obtaining. The periods may be two, while the form is one. A watch does not change its identity by being taken apart and put together again; nor by the substitution of a few old parts by new ones. It is obvious, then, why the state employed in the act of memory is identified with the state remembered.

The habit of identifying the symbol and the thing is not laid aside when the mind arises to the contemplation of things never within experience, because there is nothing in the distinction between temporal and spacial externality requiring that it should be. The first impression of an externality is that it was some prior state of mind—some state again existing through reproduction. While it is gradually excluded from actual experience, the impression is not lost that it was a state now within experience. The region of unconsciousness is not at first recognized as differing from consciousness in anything except that it is not within the field of memory. There was no manifest incongruity in identifying a state of mind with a state not rememberable. Nor was there manifest incongruity in identifying something within experience with something before not within experience. Necessarily there would be a confirmed habit of identifying the internal with the external long before the development of adequate ideas of externality.

Thus it would result that the idea must ever be identified with the external object, unless something should intervene to differentiate perception of the one from perception of the other. But there could be no such differentiation; for the only means of apprehending the object is to identify it with its representation. To distinguish the object from the idea, a new idea must be introduced, which, in turn, calls for identification or a third idea as objectionable as itself. Moreover, there is no experience demanding the differentiation. The mode produced may be found not to consist with experiences; but in such cases the impression is, not that an internal mode has been mistaken for a mode external, but that an imaginary external mode has been mistaken for a real one. Even speculation does not demand that the differentiation should take place. When it divides the symbol from its object, it is obliged to confess that it contemplates the object by identification with a duplicate symbol. It is bound to find, and it does find, propriety in the identification of the sign with the signified. The differentiation would require judgment that the thing within and the thing without differ in

this, and this, and this; whereas, in as far as the thing is before the mind, they do not differ, but are the same. The differentiation would require judgment that the form within the mind is not the form without; whereas identity of form is largely in excess of substantial diversity. The differentiation would require the complicating of perception with the distinction between the thing and the idea as the correlatives of an impression; whereas their likeness in this respect is of all-absorbing importance. The differentiation would require judgment that the thing contemplated in perception and conception is not the cause of the sensation; whereas it is the cause of the sensation which the mind has chiefly in contemplation, whatever else may be identified with it—the contemplation itself, not speculation about it, determining its correlative. There is, we see, neither possibility nor necessity of contrasting (except in speculation) the things of which we are conscious with the things of which we think. They bear the same relation to the act which identifies them. Besides other points of identity, they are one as related to the act (or part-act) of contemplating them as one.

§ 65. As with the world outside, so is consciousness acquainted with more of mind than consciousness contains. This we all spontaneously believe. This Mr. Spencer admits so far as existence is concerned. This is probable in view of the sameness of nature which must exist between modes underlying consciousness and modes therein; and is rendered more probable by the lately discussed power of communion with the external world. It may be otherwise enforced.

Mr. Spencer argues that cognition, being “the establishment of some connection between subjective states, answering to some connection between objective agencies,” “it is clear that the process, no matter how far it be carried, can never bring within the reach of Intelligence . . . the states themselves.” What being within the reach of intelligence means, should have been explained. It seems to be a tenet of Agnosticism, that if we should come into possession of all knowledge, we should be compelled to reject as illusive all that appears in consciousness.

That a state of mind can be and not be real, when being and reality mean the same, is an assertion not congenial for any one to make; yet it is implied in the denial of our power to know anything in itself. If a mental state is a real phenomenon, it is therefore a real noumenon: inasmuch as we know it, we know a noumenon. I insist upon this because it is of positive advantage to Realism; and not because Mr. Spencer denies it; for I do not understand that he does. Being known in consciousness, is, in his view, to be known so far, but to be known no farther.

From the knowledge of the subject which he admits, may be obtained the knowledge which he denies. Beyond the relations of co-existence and sequence which mental affections bear to each other, something of their natures is presented in consciousness. It needs only to contrast love and hate, to bring an instance before us. Of so much of the natures of mental states as we can know in consciousness, we can unquestionably form true ideas—ideas resembling the realities for which they stand. These ideas we can divide in a way in which their correlatives are in fact never divided. With these ideas and their elements we can form combinations such as their correlatives never form. Thus we can, probably by logical process, certainly by a process of psychological development, arise to truths concerning subjective modifications, which are, strictly speaking, never presented in consciousness. It is by this process that such abstractions as joy, hope, fear, regret, are obtained. Probably to this process we are largely indebted for the recognition of our own personality.

I must support the above by saying that Mr. Spencer never thinks of denying that reproduced modifications of mind are formed into combinations expressive of more than consciousness directly reveals. Without the power of in some manner transcending the presentations of consciousness there could be no understanding of Evolution. Without this power, it would be impossible to think that mind, as we know it, may be reduced to co-existences and sequences of states; this thought being an alluvium of the flow of consciousness.

Once across the line which divides mind as presented, from mind as only represented, there seems no necessary limit to our progress. If conception can give us a more thorough comprehension of mind than perception, why call *any* part of its nature unknowable because it cannot be perceived?

What are the arguments with which this and the preceding three chapters deal? They are confessedly arguments "from the very nature of our intelligence." (First Prin., § 27.) From the nature of intelligence as given in perception? By no means: they are deductions from the intrinsic nature of intelligence, known only by symbolization. The inconsistency is an inevitable one. Were the deduction from appearances only, it would have no conclusiveness; for, notwithstanding appearances to the contrary, we could imagine an acquaintance of mind with its environment and with itself. Again: as no essential inability to comprehend is perceivable, it can be known only by conception; but if we truly represent more of a thing than is perceptible, we so far represent its intrinsic nature. To deduce unknowableness from the nature of mind, is necessarily to rely upon symbols of more of its nature than consciousness presents.

CHAPTER XI.

THE FINAL ARGUMENT.

The Reconciliation Between Science and Religion.

§ 66. There remains for our consideration a leading argument to which all those so far examined are supposed to be subsidiary. With the preliminaries of this argument, the treatise on "The Unknowable" begins, and with its culmination that treatise is brought to a conclusion; while intervening discussions are thought to converge at the point to which it leads. Valued by the rules of logical estimation, it will be found not to merit the prominence, or to demand the degree of elaboration, in which it has been presented: it falls too far short of demonstration to be conclusive, and is too simple to require much detail. But valued with regard to its practical efficiency, it will prove not to have been overestimated; for its deviation from logical rigidity insures it an extensive audience, and its relation to the dearest interests of mankind carries it to the hearts of all. The exact bearing of these remarks may be best manifested by making known the character of the argument which they concern. Seizing upon the obvious necessity for a reconciliation between Science and Religion, Mr. Spencer turned it to his purpose, by arguing that the basis of reconciliation must be the doctrine that nothing in itself is knowable. This is substantially his presentation of the argument. 111

"Of all antagonisms of belief, the oldest, the widest, the most profound and the most important, is that between Religion and Science." (First Prin., § 3.) Religion is too deeply rooted in our nature, Science too obviously grounded on fact, to be discarded. "On both sides of this great controversy, then, truth must exist. . . . And if both have bases in the reality of things, then between them there must be a fundamental

harmony." (First Prin., § 6.) This being so, "we have to discover some fundamental verity which Religion will assert, with all possible emphasis, in the absence of Science; and which Science, with all possible emphasis, will assert in the absence of Religion—some fundamental verity in the defence of which each will find the other its ally." (First Prin., § 6.) As a belief common to all religions must be highly abstract; and as "Religion can take no cognizance of special scientific doctrines," nor Science take cognizance of special religious doctrines; "the most abstract truth contained in Religion and the most abstract truth contained in Science must be the one in which the two coalesce. The largest fact to be found within our mental range must be the one of which we are in search. Uniting these positive and negative poles of human thought, it must be the ultimate fact in our intelligence." (First Prin., § 7.) "Religions diametrically opposed in their overt dogmas, are yet perfectly at one in the tacit conviction that the existence of the world with all it contains and all which surrounds it is a mystery ever pressing for interpretation. On this point, if on no other, there is entire unanimity." (First Prin., § 14.) Every theory of creation "tacitly asserts two things: firstly, that there is something to be explained; secondly, that such and such is the explanation." (First Prin., § 14.) But "analysis of every possible hypothesis proves, not simply that no hypothesis is sufficient, but that no hypothesis is even thinkable. And thus the mystery which all religions recognize, turns out to be a far more transcendent mystery than any of them suspect—not a relative, but an absolute mystery.

"Here, then, is an ultimate religious truth of the highest possible certainty—a truth in which religions in general are at one with each other, and with a philosophy antagonistic to their special dogmas. . . . If Religion and Science are to be reconciled, the basis of reconciliation must be this deepest, widest, and most certain of all facts—that the Power which the Universe manifests to us is utterly inscrutable." (First Prin., § 14.)

An outline of the whole argument will be before us when we have added the following.

"The consciousness of an Inscrutable Power manifested to us through all phenomena, has been growing ever clearer; and must eventually be freed from its imperfections. The certainly that on the one hand such a Power exists, while on the other hand its nature transcends intuition and is beyond imagination, is the certainty towards which intelligence has from the first been progressing. To this conclusion Science inevitably arrives as it reaches its confines; while to this conclusion Religion is irresistibly driven by criticism." (First Prin., § 31.)

As intimated before, it cannot be denied that this argument has much practical efficiency. It consists of reasoning so far from close as to be apprehended by the many, and is embodied in propositions so general that its force may be felt by those who do not clearly apprehend it. Moreover, its spirit is congenial to multitudes in both the religious and the scientific camps who are wasted and wearied by the perennial conflict between the two great systems of belief. Having said so much regarding its practical strength, let us address ourselves to the question of its logical stability.

Instead of following it step by step, I prefer to attack it at the point where all its parts converge. That intellectual evolution is bringing us to the recognition of an absolute and eternal nescience, is the sum and substance of it all. This proposition is divisible into two: that scientific progress is a spontaneous advance, and religious progress a forced retreat, towards the point where things in themselves are seen to be unknowable. Of these divisions in their order.

§ 67. As author of the dissertation on "The Unknowable," Mr. Spencer considered himself the oracle of that department of Science distinguished as Metaphysics. To do this was improper only on the supposition that his reasonings were at fault. Were they at fault? or does Metaphysical Science support the conclusion he proclaimed? Foregoing criticism provides us with an answer.

Both induction and deduction have forced upon us (Chap. II.) the truth, that every argument used, or which can be used, in

proof of unknowableness, is based on the knowledge it purports to prove impossible. A number of problems, considered insoluble and supposed to be peculiar to Ontology, were found in the first place (Chaps. III., IV., & V.) capable of solution, and in the second place (Chap. VI.) presenting themselves for solution to Phenomenology. Deductions from the nature of intelligence were investigated with consonant result. The first we found to be drawn from a gross misconception of the process of comprehension; and learned that the actual nature thereof does not exclude realities from its sphere. (Chap. VII.) In the second instance it was ascertained (Chap. VIII.) that the unknowableness deduced was the unknowableness of something neither in existence nor capable of existence. The next deduction we learned (Chap. IX.) to be at best meaningless; to be drawn from an erroneous definition of life; and not to follow from either this or a proper definition. Taking then in hand an implied deduction, it was shown in opposition thereto, (Chap. X.) by testimony of consciousness and admission of opponents, that absolute knowledge is probable; by criticism and analysis, that it is possible; and by synthesis, that it is easily accounted for. In conclusion of the same chapter it was made manifest that the deductive arguments are essentially suicidal. Now the last argument is before us; and the summary here ended indicates a weakness in that argument too. The Science of Metaphysics is, then, repugnant to Mr. Spencer's views. We must next inquire if it is not so with Science in general.

After citing an illustration to which we shall afterwards advert, the author proceeds to say: "Thus it is with Science in general. Its progress in grouping particular relations of phenomena under laws, and these special laws under laws more and more general, is of necessity a progress to causes that are more and more abstract. And causes more and more abstract are of necessity causes less and less conceivable; since the formation of an abstract conception involves the dropping of certain concrete elements of thought. Hence the most abstract conception, to which Science is ever slowly approaching, is one that merges into the inconceivable or unthinkable, by the

dropping of all concrete elements of thought." (First Prin., § 29.) In the next section we find the following: "The better interpretation of each phenomenon has been, on the one hand, the rejection of a cause that was relatively conceivable in its nature but unknown in the order of its actions, and, on the other hand, the adoption of a cause that was known in the order of its actions but relatively inconceivable in its nature."

The *a priori* absurdity of the proposition, that the better interpretation of each phenomenon has been the rejection of a more and the adoption of a less conceivable cause, is so great as to amount to a sufficient refutation. It is beyond dispute that the consequent is best explained through the antecedent, when the latter is most intelligible. So unbelievable is it that nescience is the light of knowledge, that I am in favor of finding Mr. Spencer guilty of a *lapsus* of expression. His meaning probably is not that better interpretation *has been* the substitution of definite by vague causes, but that such substitution is the concomitant of better interpretation. The latter rendering best harmonizes with the declaration, that the progress of Science "in grouping particular relations of phenomena under laws, and these special laws under laws more and more general, is of necessity a progress to causes that are more and more abstract." We have, then, to deal with a very different argument from the one which at first seemed to have been presented. It is, let me say, a much more rational argument. The progress of Science, viewed collectively, certainly does furnish much seeming justification of the inference that the scientific conception of causal agency is becoming more and more abstract. The ever progressing, ever widening assimilation of fact to fact, and consequent attribution to like antecedents, is an assimilation of antecedent to antecedent, and a consequent dropping from the same of concrete peculiarities. Will the process in time remove from the conception of causation all its concrete elements, leaving us to attribute all things to a mere existence?

It is difficult to discover any grounds for thinking so. If a change towards an extreme implies that the extreme must sometime be reached, there is no end to the anomalies which

universal change implies. In particular, if the extreme must in this case be reached, we should prepare to abolish, as some propose to do, the hypothesis of noumenal causation altogether, and look for the conditions of every fact in antecedent phenomena. On the supposition that the comprehension of phenomena, consists, and wholly consists, in assimilation to other phenomena, this is the culmination to be expected. Mr. Spencer is settled in the belief, however, that when the cause has been deprived of all attributes but existence, the process of subtraction must cease. But what is the evidence that the conception of causal agency is to become as attenuated as is compatible with its persistence in thought? The only evidence left for us to consider is that it is moving towards a state of so great attenuation.

To reasons for saying that it might move past Mr. Spencer's culminating point, may be added reasons for thinking that it will not move so far. When the cause has come to be conceived as substance acting in space and time, the increase in the vagueness of its representation must give place to a counter-change. As support for this expression of my views, I will name the fact, upon which we can scarcely place too much emphasis, that "The Unknowable" is not, and cannot be, conceived as unqualified being; but is, and must be, represented as some kind of substance acting somehow in space and time. Tell us that space, for instance, is but an impression wrought by external being upon consciousness, and immediately we picture the cause you name as spacially external, spacially extended, and changing its spacial and temporal relations in the production of the appearance of space. Back of space, time, substance, and activity, when viewed as phenomena, we place that organism of things, of which, on the realistic hypothesis, each is a member, and which all compose.

Supporting this consideration is a fact which Mr. Spencer strangely overlooks. As in assimilation of causes attributes are necessarily dropped, so in assimilation of effects is there a necessary progress towards abstractness. "Progress in grouping particular relations of phenomena under laws, and these special laws under laws more and more general, is of necessity a

progress to causes that are more and more abstract;" but it is similarly a progress to phenomena that are more and more abstract. For the same reason that the Universal Cause is less definitely conceived than the cause of but one effect, the Universal Effect is less definitely conceived than is a particular effect. Science is ever adding to the denotations of the word "effect," and detracting from its connotations: will it therefore eventually mean no more than "caused existence?" There is the same reason for thinking so, that there is for thinking that the ultimate signification of "cause" will be "causing existence."

Observe now, which will add something to the last consideration, that the assimilation of causes is represented as resulting from assimilation of effects. The assimilation of two effects brings about the assimilation of their two causes; three causes assimilated, signifies three effects previously assimilated. The grouping or unification of all causes, therefore, depends upon the prior grouping or unification of all effects. Effects are to vanish before their causes from the realm of contemplation!

In both cases, the truth is, there will be the same deliverance: effects, no more than causes, can be reduced to anything less definite than substantial activity.

A second fact, of like bearing, which Mr. Spencer has overlooked, is that scientific progress does not entirely consist in likening one thing to another. If it did, the grand *finale* of Science would be the disappearance from its sphere of all facts; for in no respect do all phenomena agree, except that in which they agree with "The Unknowable." In the universe, difference, if not preponderant over similarity, is no more capable of elimination. Each phenomenon presents something peculiar to itself—something that will not classify; and this element pervades all others. Co-extensive, if not more than co-extensive, with recognition of likeness, must therefore go recognition of unlikeness. No fact is thoroughly understood until it is not only completely likened to the like, but also completely contrasted with the unlike. Should we, however, represent Science as solely occupied in reducing facts to greater definiteness, and therefore to greater coherence and heterogeneity, we

should be guilty of an aberration similar to that of Mr. Spencer when he represents Science as solely occupied in reducing facts to greater indefiniteness, and therefore (although he would be loath to accept this consequence) to greater incoherence and homogeneity. Science does neither solely. The decomposition of facts and assortment of their like elements into general notions, should be understood to be but a mean to the better understanding of the objective synthesis, in which they are presented, and in which they are to be ultimately construed.

Now another qualification must be subjoined. Neither through unlikeness alone, nor through likeness alone, nor yet through a combination of the two, may things obtain a final comprehension. The relation of cause and effect is a circumstance very available in reducing facts to their most comprehensible form. Causes that best explain their effects are those most definitely conceived. I shall attempt to illustrate so as to meet all Mr. Spencer's arguments to the contrary. The child who hears "hard times" attributed to a providential visitation, remains in about as much perplexity as before. It is not because the agency named, or rather its mode of operation, is not classified or not distinguished: on the contrary, the instance of causation to be understood is assimilated to the one, and distinguished from the other, moiety of all familiar instances of causation. The difficulty is that the relation of antecedent and consequent is not definitely delineable. For if we make it still less definite, by telling the child that an unconditioned cause was that which occasioned the fact to be explained, we advance an explanation less efficient than the one previously advanced. Suppose we try the opposite experiment of naming a very definite cause—suppose we attribute the mysterious effect to the prevalence of dark spots upon the sun. "Here," we may suppose Mr. Spencer to interpose, "you have named a very definite cause, but the child is as far from comprehension as before." True; but not to the point. Comprehension through the relation of cause and effect requires not merely a definite cause; but requires nothing less than definite causation. Wait until we have made the causation in question definitely con-

ceivable, by explaining to the child that the sun spots, by affecting crops, affected the general prosperity, and you will find that a flood of light will break upon his understanding. "But," we may suppose Mr. Spencer to object, "you must, if you wish the child to understand the truth, ultimately supplant the definite solution just given by another less definite; as you will perceive when you reflect that the real cause of 'hard times' was the failure of a single business house, which, by destroying mutual confidence, disturbed conditions of unstable equilibrium, and hence brought about a crash." Very true, and equally inconclusive. It would be useless folly to deny that the right solution is frequently less definite than the wrong solution. Nor is this fact due in every case to accident: necessarily an explanation which has long had possession of the field has come to be definitely conceived; and an explanation just arising to supplant it is necessarily vague. But no sooner does a new solution take the place of an old one than it begins to develop definiteness. Having given to the child the last solution, how do you better it, but by going further into details? The initial failure is sufficiently intelligible to the child; but if it were not, we would explain that so much was due here, so much owing there, and that the embarrassment consequent upon the disproportion increased the same, ultimately bringing about suspension and exposure. Disturbances of unstable equilibrium, and the following of failure from failure, we might explain by the familiar and exceedingly definite illustration of a structure of cards falling into utter ruin upon the withdrawal of one. Throughout our illustration, it has been uniformly manifested that the light which causation throws upon the mystery of its effect, is proportionate to the definiteness with which it is itself conceived. When to this we add the conclusion, previously reached, that phenomena are as incapable of complete assimilation as they are of universal distinction, we shall apprehend no approach to the conception of the Universal Cause as an indefinite existence.

A teleological argument may be of some weight with one who occasionally resorts to arguments of the kind. To be

deprived of explanation through causation would be a sore affliction. We are not to be consoled by telling us that distinction and assimilation are powerful aids to comprehension. Are they alone as efficient as they and a realization, an extensive realization, of causation would be? We must answer that they are not. Mr. Spencer himself has spoken a confirmation of our misgivings. I do not refer to his belief that all facts are deducible, and have been by him in a manner deduced, from the continued existence of "The Unknowable." (First Prin., Part II., Chap. VI.) What I refer to is this: "were self-existence conceivable, it would not in any sense be an explanation of the Universe. No one will say that the existence of an object at the present moment is made easier to understand by the discovery that it existed an hour ago, a day ago, or a year ago. . . . The assertion that the Universe is self-existent does not really carry us a step beyond the cognition of its present existence; and so leaves us with a mere re-statement of the mystery." (First Prin., § 11.) After this we read with dissent, that "whoever contemplates the relation in which it stands to the truths of science in general, will see that" the truth which is "the basis of science" is "the Persistence of Force" (First Prin., § 61.); and that "by the Persistence of Force, we really mean the persistence of some Cause which transcends our knowledge and conception." (First Prin., § 62.) We must incline to the prior persuasion, that continued existence (for so he defines "persistence") is a very shadowy basis of solution; that it explains present existence, but little more. It is probable, as we found it to be desirable, that the Cause which Science is ever investigating will always present greater definiteness than that of an unconditioned existence.

The illustration of Mr. Spencer's views concerning the progress of Science, to which it was said we should return, is the following.

"Of old the Sun was regarded as the chariot of a god, drawn by horses. . . . When, many centuries after, Kepler discovered that the planets moved round the Sun in ellipses and described equal areas in equal times, he concluded that in each planet

there must exist a spirit to guide its movements. . . . When, finally, it was proved that these planetary revolutions with all their variations and disturbances, conformed to one universal law—when the presiding spirits which Kepler conceived were set aside, and the force of gravitation put in their place; the change was really the abolition of an imaginable agency, and the substitution of an unimaginable one. For though the *law* of gravitation is within our mental grasp, it is impossible to realize in thought the *force* of gravitation.” (First Prin., § 29.)

I consider this example as about the most favorable to himself that Mr. Spencer could have chosen. Here are some that do not favor him. The cause of the sensation of color, and of its various modifications, has been made more definitely conceivable by the more definite understanding of the nature of light. The sensations of heat and light are more completely accounted for than they would be if we had not ceased to attribute them to fluid substances which are so unlike fluids as to pass through dense objects, such as glass or metal, much better than they pass through porous objects, such as wood. The cause of sound is much more clearly conceived by the instructor who gives the explanation, than by the scholar who needs it. A farm-boy has a very indefinite notion of the antecedents which terminate in the visible and conspicuous result of incubation; to the biologist its antecedents are far from vague. The operation of the machinery covered by his skin is known to the savage only through its external manifestations; while a definite understanding of its hidden nature is at once the aim and the pride of an important department of Science. These examples, and they might be indefinitely multiplied, show that scientific progress is frequently towards a more detailed comprehension of causes.

My choice of illustrations has been both guided and circumscribed by a fact unfortunately not noticed by Mr. Spencer. Mysteries which are conspicuous and striking are the ones that present themselves as such to primitive man, and are the ones therefore to which he seeks to find solutions. His solutions being as definite as his sense of general congruity will permit, are very definite indeed, and must be subsequently replaced

by others less definite. So that if I should choose a conspicuous mystery as the basis of illustration, I should be met by the fact that the first inquirers have given it a definite solution, early scientists have given it a less definite solution, and later scientists have given it a solution the least definite of all. The examples given are not, therefore, as striking as the one of which Mr. Spencer has availed himself and others available to him.

As has been already noticed, the general remarks just ended have a very important present application. On *a priori* grounds one ignorant of the fact might satisfy himself that the apparent motion of the sun must find a solution before the dawn of Science; that the first solution must be as definite as contemporaneous knowledge would allow it to be; and that Science must sometime advance a less definite solution, perhaps falling into a similar error to be afterwards similarly corrected. Such indeed is part of the history of Science; but it is not all. Science often prefers a vague solution to one less vague; but when it has chosen between solutions, it wishes the one chosen to be, and proceeds to make it, as definite as it can be made.

If this is not so, what means the hypothesis of influences projected from object to object through an intervening medium? Would not Science advance materially, if some one should explain clearly what the force of gravitation is? This is a test question. If a solution of gravitation as definite, for instance, as a child can have of the mysteries of a watch, would in the least advance Science, the progress of Science is not essentially towards vaguer representations of causation.

We have found nothing favoring, but very much opposing, the conclusion that a settled nescience is to be an outcome of scientific progress. That an examination of Religious evolution will show the same result, is, therefore, highly probable.

§ 68. With a mere reference to the foregoing exposition, we may dismiss the claim that Science is, or ever has been, forcing Religion to a realm of nescience. If Religion will not spontaneously accept an "Unknowable Cause" as the object of its contemplation, there is nothing to force it into doing so. What

is the author's theory of the germination and development of Religion? The following is an abstract of the account which he gives in the first part of his work on Sociology.

Primitive man shows no native tendency towards supernatural interpretation. Only after he has been "betrayed into an initial error" (§ 205)—only after certain experiences have suggested to him the existence of spirits, does he begin to think of them as agencies. He "regards a dream as a series of actual adventures: he did the things, went to the places, saw the persons dreamt of." (§ 206.) While he was conscious of his absence from his couch, others were conscious of his presence. "Untroubled by incongruities, he accepts the facts as they stand; and, in proportion as he thinks about them, he is led to conceive a double which goes away during sleep and comes back." (§ 205.) The unconsciousness of sleep being first explained by the absence of the other-self, all kinds of unconsciousness are eventually explained in the same way. The explanation is little by little extended to the insensibility of swoon, apoplexy, catalepsy, ecstasy, coma, wounds, and finally death. Other kinds of unconsciousness being terminated by renewal of animation, the earliest inference of the savage is that death is so terminated. "He witnesses insensibilities various in their lengths and various in their degrees. After the immense majority of them there come reanimations—daily after sleep, frequently after swoon, occasionally after coma, now and then after wounds or blows. What about this other form of insensibility?—will not reanimation follow this also?" (§ 82.) Among other experiences, reanimation after supposed death "helps to convince him that the insensibility of death is like all other insensibilities—only temporary." (§ 82.) From the notion of an after-life terminated by return of the soul to the body, "the notion of an enduring after-life is reached through stages." (§ 100.) "The idea of death differentiates slowly from the idea of temporary insensibility. At first reanimation is looked for in a few hours, or in a few days, or in a few years; and gradually, as death becomes more definitely conceived, reanimation is not looked for till the end of all things." (§ 90.)

"The doubles of dead men, at first assumed to have but temporary second lives, do not, in that case, tend to form in popular belief an accumulating host; but they necessarily tend to form such a host when permanent second lives are ascribed to them. Swarming everywhere, capable of appearing and disappearing at will, and working in ways that cannot be foreseen, they are thought of as the causes of all things which are strange, unexpected, inexplicable. Every deviation from the ordinary is ascribed to their agency; and their agency is alleged even where what we call natural causation seems obvious." (§ 206.) "With the development of the doctrine of ghosts, there grows up an easy solution of all those changes which the heavens and earth are hourly exhibiting. Clouds that gather and presently vanish, shooting stars that appear and disappear, sudden darkenings of the water's surface by a breeze, animal-metamorphoses, transmutations of substance, storms, earthquakes, eruptions—all of them become explicable. These beings, to whom is ascribed the power of making themselves now visible and now invisible, and to whose other powers no limits are known, are omnipresent. Accounting as they seem to do for all unexpected changes, their own existence becomes further verified." (§ 118.) The "machinery of causation which primitive man is inevitably led to frame for himself, fills his mind to the exclusion of any other machinery. Fully to understand the development of human thought under all its aspects, we must carefully observe that this hypothesis of ghost-agency gains a settled occupation of the field, long before there is either the power or the opportunity of gathering together and organizing the experiences which yield the hypothesis of physical causation." (§ 120.) "Thus it becomes manifest that setting out with the wandering double which the dream suggests; passing to the double that goes away at death; advancing from this ghost, at first supposed to have but a transitory second life, to ghosts which exist permanently and therefore accumulate; the primitive man is led gradually to people surrounding space with supernatural beings which inevitably become in his mind causal agents for everything unfamiliar." (§ 206.) "Further,

the hypothesis to which the ghost-theory leads, at first limited to anomalous occurrences, extends itself to all phenomena; so that the properties and actions of surrounding things, as well as the thoughts and feelings of men, are ascribed to unseen beings, who thus constitute a combined mechanism of causation." (§ 207.)

While supernatural interpretation is extended, ideas of the other world and of its inhabitants undergo development. "The habitat of the dead, originally conceived as coinciding with that of the living, gradually diverges—here to the adjacent forest, there to the remoter forest, and elsewhere to distant hills and mountains." In the imagination of the savage, "the other-life, which at first repeated this exactly, becomes more and more unlike it; and its place, from a completely known adjacent spot, passes to a somewhere unknown and unimagined." (§ 115.)

A similar change occurs in the conception of supernatural beings. "The second-self ascribed to each man, at first differs in nothing from its original. It is figured as equally visible, equally material; and no less suffers hunger, thirst, fatigue, pain. Indistinguishable from the person himself, capable of being slain, drowned, or otherwise destroyed a second time, the original ghost, soul, or spirit, differentiates slowly in supposed nature. Aiming to reconcile conclusions, progressing thought ascribes a less and less gross materiality; and while the ghost, having at the outset but a temporary second life, gradually acquires a permanent one, it deviates more and more in substance from the body: becoming at length etherealized." (§ 206.) "The second-self, originally conceived as equally substantial with the first, grows step by step less substantial: now it is semi-solid, now it is aeriform, now it is ethereal." (§ 98.)

By a parallel progression, differences of caste among the population of the spirit-world arise. "Substantially similar as ghosts are at first conceived to be, they become unlike as fast as the tribe grows, complicates, and begins to have a history: the ghost-fauna, almost homogeneous at the outset, differentiates." (§ 207.) "Out of the assemblage of ghosts, some evolve into deities, who retain their anthropomorphic characters. As the divine and the superior are, in the

primitive mind, equivalent ideas—as the living man and re-appearing ghost are at first confounded in his beliefs—as ghost and god are originally convertible terms; we may understand how the deity develops out of the powerful man, and the ghost of the powerful man, by small steps. Within the tribe the chief, the magician, or the man otherwise skilled, held in awe during his life as showing powers of unknown origin and extent, is feared in a higher degree when, after death, he gains the further powers possessed by all ghosts; and still more the stranger bringing new arts, as well as the conqueror of superior race, is treated as a superhuman being during life, and afterwards worshiped as a yet greater superhuman being. Remembering that the most marvelous version of any story habitually obtains the greatest currency, and that so, from generation to generation, the deeds of such traditional persons must grow by unchecked exaggerations eagerly listened to; we may see that in time any amount of expansion and idealization can be reached.” (§ 206.) The apotheosis of the distinguished dead is perfected by lapse of time. Remote ancestors are deified before recent ones. “Along with worship of recent and local ancestors, there goes worship of ancestors who died at earlier dates, and who, remembered by their power or position, have acquired in the general mind a supremacy.” (§149.) Another factor aids in giving to supernatural beings differences of rank. “When social ranks are established, there follow contrasts of rank and accompanying potency among supernatural beings; which, as legends expand, grow more and more marked. Eventually there is formed in this way a hierarchy of partially-deified ancestors, demigods, great gods, and among the great gods one that is supreme; while there is simultaneously formed a hierarchy of diabolical powers.” (§ 207.)

“The theory of the Cosmos, beginning with fitful ghost-agency, and ending with the orderly action of a universal Unknown Power, exemplifies once more the law fulfilled by all ascending transformations.” (§ 207.)

From gods and demons, Mr. Spencer’s narrative passes abruptly to “The Unknowable,” and abruptly stops. As the transition has by no means yet been made, his assumption of its

actuality amounts to no more than the prediction that it will be made; and the grounds of the prediction are those of which we are now in consideration. A new assertion must not be mistaken for additional proof.

Equally gratuitous is the assumption, that attenuation of spirit-cause will cease when nothing is left to it but existence. If attribute after attribute of supernatural agency fades from thought as thought progresses, analogy suggests that all its attributes will be excluded from thought the most completely evolved.

We shall now see that the last transition being inadequately dealt with Mr. Spencer's account of the genesis of Religion contains little, if anything, in support of his nescience doctrines.

For Religion Mr. Spencer makes this claim: "In its earliest and crudest forms it manifested, however vaguely and inconsistently, an intuition forming the germ of this highest belief in which all philosophies finally unite." "It has everywhere established and propagated one or other modification of the doctrine that all things are manifestations of a Power that transcends our knowledge." (First Prin., § 28.)

Clothed in a discreet ambiguity, this claim may seem to have a substantial significance. Deprived of its ambiguousness, it will stand forth in naked frailty. The "intuition forming the germ of" the "highest belief," is not a vague consciousness of a power transcending knowledge. It is no more than the thought, that this circle of wind and dust, or that strange mocking sound, is due to some agency. Such belief may be a "modification of the doctrine that all things are manifestations of a Power that transcends our knowledge;" but it is a modification exclusive of the contested elements. The cause which primitive religion contemplates, is not the Cause of all things, but of this or that which seems mysterious; it is not a cause transcending all conception, but many causes definitely conceived. The basal intuition is that there is a cause, not that the cause is of indefinable nature. If there be an Unknowable, it is not this which early Religion contemplates. I am happy to be able to quote the author to this effect. "Can so many and such varied similarities [as those between worship of deities and

worship of the dead] have arisen in the absence of genetic relationship? Suppose the two sets of phenomena unconnected—suppose primitive men had, *as some think* [the emphasis is mine], the consciousness of a Universal Power whence they and all other things proceeded. What probability would there be that towards such a Power they would spontaneously perform an act like that performed by them to the dead body of a fellow savage? And if one such community would not be probable, what would be the probability of two such acts in common? what the probability of four? what of the score communities above specified? In the absence of causal relation the probability against such a correspondence would be almost infinity to one." (Prin. of Sociology, § 145.) This passage is of importance as a concession that the agency, of which primitive Religion is now and then conscious, is not "The Unknowable"—that the intuition said to form the germ of the so-called highest belief has as much in common with a contrary belief—that the first belief propagated by Religion is no more a "modification of the doctrine that all things are manifestations of a Power that transcends our knowledge," than it is a modification of the doctrine that all things are manifestations of a Power within our knowledge. Nay, it may in strictness be held, that primitive Religion contains the germ of belief in the cognoscibility of causal agency in general. Here is our author's confession and avoidance of this allegation. "Every religion, setting out though it does with the tacit assertion of a mystery, forthwith proceeds to give some solution of this mystery; and so asserts that it is not a mystery passing human comprehension. But an examination of the solutions they severally propound, shows them to be uniformly invalid." (First Prin., § 14.) If, as may reasonably be assumed, the force of this concluding qualification has been dissipated—if it has been shown (Chap. III.) that religious solutions of universal existence are not essentially at fault; we may note the admission, that not only primitive religions, but all religions, embody a so-far insuperable faith that the mysteries which they contemplate are not insoluble. Truly there is meaning in Mr.

Spencer's complaint that Religion "has all along professed to have some knowledge of that which transcends knowledge;" that, after assertion to the contrary it has, "with the next breath, asserted that the Cause of all things possesses such or such attributes—can be in so far understood." (First Prin., § 28.) Assuredly there is an important admission in the charge that, when face to face with Science, "Religion shows a secret fear that all things may some day be explained; and thus itself betrays a lurking doubt whether that Incomprehensible Cause of which it is conscious is really incomprehensible." (First Prin., § 28.) We have now before us the means of justly estimating the claim, that the kernel of Religion is the germ of Agnosticism. With greater propriety may it be called the germ of a quite contrary belief. Dismissing, then, the argument from germination as satisfactorily refuted, we shall next consider the argument from development.

In what kind of change does the evolution of religious belief consist? The admission must be made, that it has consisted largely in change from contemplation of many definite causes of numerous particular phenomena, to contemplation of one comparatively indefinite cause of things in general. Is this change to be throughout the future a mere prolongation of what it has been in the past, until the extreme of nihility has been reached? We have Mr. Spencer's assertion to the contrary. His grounds are far from satisfactory: they are that we cannot suppress a sense of something unconditioned—a doctrine which we found (§§ 41–48) to be untenable, and, so long as the Cause may be supposed to have conditions, irrelevant. But though the reason fails, the fact of admitting that evolution may stop for ever short of extremity, remains available to us. The implication is, that uniform progress up to a certain point does not insure like progress past that point. If Mr. Spencer may believe that the excluding process will cease when existence only is left, we may believe that it will cease while other attributes remain. The obligation of showing grounds for this latter belief, as Mr. Spencer sought to show grounds for the former, of course rests on them who hold it. In brief, our

grounds may be said to be that the circumstances which tend to bring about attenuation of the causal conception, will, before the degree of attenuation predicted by Mr. Spencer has been reached, cease to operate upon it. This proposition needs some expansion.

Religious advancement is partly spontaneous, partly forced. In the absence of Science, so-thought spiritual manifestations would have been from time to time assimilated; and the cause of several would have been conceived more vaguely than the cause of one. From the nature of the circumstances it was inevitable that the most powerful spirits should be the oftenest suggested, and that the oftenest suggested should make the greatest acquisitions of power; and it was similarly inevitable that these should survive the rest in tradition, gaining credit for their acts and powers, and thus losing specialties of nature. Add to which, that, in itself, the lapse of time would have been sufficient to greatly obliterate the definiteness and extend the power of permanently-existing gods. Without external coercion, Religion must necessarily have attributed the existence of all things to spirit-agency; for habitual solutions are most readily suggested and most willingly applied. Science, then, is not entitled to the credit of having caused Religion to embrace the doctrine of a Supreme Power. It is far more probable that Religion has introduced this doctrine into Science. Yet there is much in religious development that is due to the coercion of Science. It is due to the coercion of Science that Religion has withdrawn its solution from mystery after mystery to which it had been erroneously applied. From this it followed that Religion has continually narrowed the application of its solution to more and more general, more and more abstract, and more and more recondite mysteries; until it has almost limited this solution to the most general, most abstract, and most recondite mystery — the mystery of mysteries. Possibly Religion would never have spontaneously contemplated the Supreme Power as the only power proper for its contemplation. It would have been more likely to retain in its creed belief in many minor powers. The Supreme Power would have occasionally encroached on demesnes

at first assigned to others, and would have occasionally crowded others out of theology; but it is doubtful whether it would ever have become to Religion the sole worker of the wonders which Religion contemplates. If Science had not forced a substitute in the place of every subordinate agency postulated by Religion, it is probable that Religion would now contemplate, as Science does, not only Cause in the general and abstract, but also causes in the particular and concrete. There needed something more than is internal to Religion to dispossess it of concrete interpretation. Nor would Religion, without compulsion, have modified sufficiently its gross representations of Supreme Power. Abstract Science from the inheritance of the age, and misrepresentations of the Highest Cause will grow daily more definite.

But having changed its nature, Religion must change the course of its development. Old factors can no longer operate, because they no longer exist. When Religion has been induced to contemplate the Great Cause as substance acting in space and time, she has relieved herself of the influences which before wrought constant increase in vagueness of conception. The Cause is not to be made less definitely conceivable by lapse of time; because lapse of time cannot cause any of the attributes essential to substance acting in space and time to fade from memory. It cannot be made less definitely conceivable by attributing to it a wider, and therefore less definite, class of effects; because we have already attributed to it the widest and most indefinite of all classes of effects; and because, moreover, as we ascribe to it no effect less definite than substance, activity, space, or time, we ascribe to it nothing which causes us to conceive it more vaguely. It cannot be made less definitely conceivable by blending its nature with other causes lacking its peculiarities; because we can conceive no other cause lacking the peculiarities of substance, activity, space, and time; and because, moreover, it is the final product which we have already obtained by eliminating (as far as may be) the unlike peculiarities of dissimilar causes.

When Religion has learned to describe the Cause of all things as substance acting in space and time, Science can deprive her of no concrete interpretations; since

so long as she confines herself to this description, she can have no concrete interpretations. Nor can Science compel her to modify essentially this conception of the Cause; since this is just the conception which Science is compelled to entertain.

In a high, but not an empty, abstraction Religion and Science find a common creed.

§ 69. The abstraction, in adoption of which Religion and Science may find agreement, is not proposed as more than the germ of a complete and final reconciliation between them. It is about as abstract as Mr. Spencer predicted the basis of unanimity would be; it is far more abstract than progressing intelligence will permit it to remain. The complement of advance to that vagueness which eliminates concrete errors, is a subsequent advance to that definiteness consisting of concrete truths. Describe a cause as indefinitely as language will permit—define it as an undefined existence—and it will become more definitely conceivable in proportion as its manifestations are more definitely conceived: so even Mr. Spencer's proposed reconciliation would be no more than temporary. There is no reason for concluding, as he did, that neither Science nor Religion can take cognizance of special doctrines of the other; except that these doctrines are irrelevant or unsound, which all are not. Concurrence on a special doctrine, it is true, is not likely to initiate coalescence; but, on the other hand, there can be no complete concurrence while any special doctrine is respectively asserted and denied. Even more than this may be said. If either Science or Religion holds, or shall hereafter come into possession of, any truth concerning that which both contemplate, it will be able to force assent from the other. We may predict, therefore, that when Science and Religion awaken to the truth that there is a fundamental sameness between them, they will operate together in the work of making their common conception more definite; and we may also predict that throughout the process each will be prejudiced in favor of what it desires to contribute, and against that sought to be contributed by the other; and lastly we may predict that a complete

reconciliation will be attained when each rejects its own errors and accepts the other's truths. The reconciliation does not demand that everything should be explained; but only that there shall not be two sets of explanations.

The reconciliation proposed by Mr. Spencer would be no reconciliation at all. No sooner would it become the accepted doctrine that the Cause of all things is unknowable, than each thinker would frame a conception of it to suit himself. The Materialist would conceive it as material; the Spiritualist would conceive it as spiritual; the Realist, of whatever denomination, would conceive it as he conceived it before: for, if nothing can be knowingly affirmed of "The Unknowable," of it nothing can be knowingly denied. I am not speculating entirely on probabilities. "Is it not just possible," asks the author, reflecting on the nature of the inscrutable, "that there is a mode of being as much transcending Intelligence and Will, as these transcend mechanical motion. It is true that we are totally unable to conceive any such higher mode of being. But this is not a reason for questioning its existence; it is rather the reverse." (First Prin., § 31.) Following this example, any one might argue that the outer world is just what he thought it was before he read a word of Mr. Spencer's writings ("created by an external agency," for example); because if the impossibility of conceiving such a thing has been demonstrated, "this is not a reason for questioning its existence," but "is rather the reverse." It is not probable that many would choose to justify themselves by such reasonings; since Mr. Spencer's doctrine leaves them free to rely, for justification of their beliefs concerning external things, on the inclination to believe and the impossibility of refutation.

Besides leaving the question of the constitution of noumena in a state of perpetual agitation, Mr. Spencer's proposed reconciliation would leave unsettled the question of the genesis of phenomena. The Religionist would still hold that the first phenomenon was the manifestation which he calls God; the Scientist would still hold that the group of manifestations which he calls the Physical Universe was never derived from any manifestation other than what was,

in all essentials, its prior self. Thus would the old dispute arise anew. Then there would be need for a reconciliation; and this would probably be brought about by adoption, on the part of both Science and Religion, of some high abstraction, and subsequent reduction to consistent definiteness. They would probably be compelled, each by the other, to adopt the belief that substance, activity, space, and time, compose an eternal and universal phenomenon from which ever have proceeded, and ever will proceed, all phenomena. And having found concurrence in this high abstraction, they would probably proceed to make joint inquiry regarding the kind or kinds of substance and activity, and the when and where.

In the double inadequacy of the reconciliation proposed by Mr. Spencer; and in the probability that in so far as it might be rectified, it would be supplemented by essentially the same reconciliation that we propose; there is vindication of the latter.

It will be seen that what is here predicted is not a differentiation which shall further increase the unlikeness between Science and Religion, but an integration which shall make them one. Integration is no less a part of evolution than differentiation; in fact integration is represented by Mr. Spencer as the change from which follows increase of definiteness, coherence, and heterogeneity. Nor, in the case of Science and Religion, would integration fail to bring about increased differentiation; for the differences cancelled would be more than compensated for by the possibility of a higher evolution in the world of thought than speculative differences and supposed speculative imbecility now permit. Mr. Spencer's reconciliation is to be reached by a progress towards indefiniteness of conception, is to set a limit to the integration and coherence of scientific and religious thought, and is to bring the differentiation of Religion to a stand. The alternative reconciliation, being an integration of separate bodies of thought, promising rapid increase of definiteness, coherence, and heterogeneity, seems very much more conformable to the formula of evolution.

If we seek to discover in the author's reasoning the underlying error, we will find it to consist in drawing too boldly the

line of demarcation between Science and Religion. There is a contrast between them, but it is a contrast of non-essentials. The peculiarity of Religion is that it has a solution for which it has sought to retain a mystery; the peculiarity of Science is that it has many mysteries for which it seeks to find solutions. Yet the contrast does not hold in respect to details. It was when alert for the solution of many mysteries previously recognized, that the hypothesis of spirit-agency was first adopted; and religious advancement has throughout consisted very extensively in better adapting its solutions to the problems to be solved. As it has advanced, moreover, Religion has absorbed more and more of the scientific method; until in our day scarcely any theologian dares to wantonly distort facts to suit dogmas, but dares rather to modify dogmas to suit facts. On the other hand also, the history of religious growth has been, on a small scale, repeated over and over in the history of Science. When a scientific hypothesis has been once adopted, its adherents transfer to it the allegiance they owe to truth: they will unreflectingly extend it to additional facts; they will urge it in almost open opposition to fact; and, when obliged to abandon it as the solution of one mystery, they will find for it another. The conduct of men of Science, as well as that of their opponents in the religious camp, reminds us of the wit who said that, having thought of a splendid answer to a conundrum, all he wanted was the other part. As is the case with Religion, some scientific doctrines are gradually forced into a narrower range of application, and in the same measure supplanted, by other scientific doctrines; and some thus threaten with complete extinction shade gradually into entire validity. The contrast between Science and Religion is, then, essentially like contrasts between constituents of each. They differ, not in respect of elements, but in respect of extraneous circumstances. Religion is Science which had gone astray, groping to attain the goal; Science is Religion, now turned back to procure the aid of which at first it did not feel the need. Yet neither is all hypothesis, neither is all observation: in each the two methods are united; in both, when joined, there will be a similar union.

How like each other are Science and Religion, may be better exhibited by a still deeper analysis. In both we recognize an intellectual element. Both seek truth, and both employ fact and speculation as the means to its attainment. If Religion should attain its highest wish, the Universal Cause would be so well apprehended as to explain all things; if Science should attain as much as it desires, all things would be attributed to an origin which will explain them: what either fails to realize the other loses. Verification of Mr. Spencer's prediction would take from Religion its intellectual element, consigning it to blind contemplation of what it cannot know.

Besides the intellectual element, there is in both Science and Religion an emotional element. If there is anything external calling for such or such emotions, it is the duty of Science to produce and to sustain them, and of Religion to do the same. Should Mr. Spencer's prediction be verified, Religion would be deprived of all but the minutest remnant of its emotional element; for there can be no fixed sentiment towards that which may be anything—anything from god to demon, from substance to possibility of sensation, from an active to a passive entity, from an infinite environment to a mere shell of consciousness. The emotion left to Religion might well be one of philosophical contempt.

But besides their intellectual and emotional elements, there is a moral element in both Science and Religion. Belief and the emotions which it calls forth determine our estimate of conduct as right or wrong. So long as there are two sets of beliefs and sentiments, there will be two ethical codes. Religion cannot properly prescribe conduct without absorbing all Science; Science cannot rule our morals while Religion is the sole possessor of a single truth, or the sole entertainer of a single proper sentiment. To say that each will fully recognize the claims which the other has to urge, is but to say that each will become the other. This of course is not what Mr. Spencer holds. He would take its moral element from Religion, and accord to Science the entire supervision of human conduct.

Contemplation of "The Unknowable," devoid of thought, productive of no worthy emotion, and

leading to no ethical consequences, is assigned to Religion; while to Science is assigned knowledge of the true, the good, the beautiful,—sustaining all just emotion, and revealing to us what is good or bad in conduct. This is the reconciliation issuing from extinction of one of the contending powers.

It is safer to predict, that, as they struggle to perform the same function, they will eventually integrate. Or taking a broader view, and allowing for the development which must follow fast upon advancing coalescence, we may predict that the Science and the Religion of to-day shall pass into something more worthy than either, which shall take their place. It shall be composed of all the elements into which we have seen each of them may be resolved; but there shall be an absence of logical conflict between thought and thought, between emotion and emotion, and between act and act. It shall investigate both the *ego* and the *non-ego*; and shall reveal something of all that was, or is, or is to be. It shall teach us what to love, what to admire, what to emulate, what to obey. It shall address itself at once to the understanding and the sentiment of man; proclaiming duty with persuasive voice.



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